TOYOTA

Toyota Motor North America, Inc.
1588 Woodridge Avenue
Ann Arbor, Michigan 48105

August 6, 2020
Mr. Allen Lyons, Chief
Emissions Certification and Compliance Division
California Air Resources Board
9480 Telstar Avenue, Suite 4
El Monte, CA 91731

Subject: Voluntary Emissions Recall Report for Toyota Safety Recall Campaign 20TA10 on Certain Toyota 2013-2015 Model Year (MY) Prius, 2014-2017MY Prius V Vehicles Inverter and CARB Approval Letter #F-2020-067 dated July 16, 2020

Toyota launched the subject campaign on July 24, 2020. Approximately 266,637 total units are affected by this campaign. The 20TA10 instructs any authorized Toyota dealer to update the hybrid system software FREE OF CHARGE. For customer satisfaction, if the vehicle has experienced an inverter failure with certain hybrid system faults related to this condition, the inverter assembly will be repaired or replaced FREE OF CHARGE. The involved vehicles were designed to enter a failsafe driving mode in response to certain hybrid system faults. Toyota has found that in rare situations, the vehicle may not enter a fail-safe driving mode as intended. If this occurs, the vehicle could lose power and stall. While power steering and braking would remain operational, a vehicle stall while driving at higher speeds could increase the risk of a crash. The subject vehicles were not involved in Safety Recall J0V because they were originally equipped with the E0E/F0R version of the software, used to control the boost converter in the Intelligent Power Module (IPM) within the inverter assembly of the vehicle's hybrid system, that contains improved thermal management. On June 24, 2020, Toyota filed a Defect Information Report (DIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall 20TA10.

This campaign affects 94,405 California vehicles. OBD is not affected. This campaign will incorporate the California Department of Motor Vehicle (DMV) Registration Renewal/Recall Tie-in Program, consistent with the current CARB COVID-19 policy. Owners will be unable to register or sell their vehicles if the subject campaign is not completed and a Proof of Correction (POC) form is not issued.

Pursuant to the requirements outlined in Part 85 (Subpart T) of 40 CFR, Toyota has issued the attached Emissions Defect Information Report (EDIR) #TOYOTA-DIR-20200714 on July 14, 2020, Field Fixies (#15-TF-37, 14-TF-48, 13-TF-60) on October 30, 2018 and (#17-TF-66, 16-TF-95 and 15-TF-48) (revised) on June 25, 2020. The applicable letters and Technical Instructions (TI) for this campaign are also attached for your reference. If you have any further questions or need additional information regarding this matter, please contact Mr. Arvon Mitcham of my staff at (734) 995-5587 or arvon.mitcham@toyota.com.

Sincerely,

William Meschievitz
Group Manager
Powertrain Certification and Compliance

cc: Mr. Wong, Mr. Ho – Field Operations/Warranty Section
S177 States: State of CT, DE, ME, MD, MA, NJ, NY, OR, PA, RI, VT, WA

1. Description of Potentially Affected Vehicles

Make(s)	*Model Year(s)*	*Model(s)*	*Test Group(s)*	*Engine(s)*	*Approximately Potentially Affected Vehicles*
Toyota	2013	Prius	DTYXV01.8HC3	2ZR-FXE	10
Toyota	2014	Prius	ETYXV01.8HC3	2ZR-FXE	60,559
Toyota	2014	Prius V	ETYXV01.8CCU	2ZR-FXE	10,313
Toyota	2015	Prius	FTYXV01.8HC3	2ZR-FXE	144,266
Toyota	2015	Prius V	FTYXV01.8CCU	2ZR-FXE	22,659
Toyota	2016	Prius V	GTYXV01.8PCU	2ZR-FXE	13,099
Toyota	2017	Prius V	HTYXV01.8P3U	2ZR-FXE	15,731

Number of the affected vehicles is approximately 266,637 total units and approximately 94,405 California units. For S177 States, the number of vehicles is: MA=5,646; ME=1,282; NJ=3,629; NY=9,957; VT=950

2. Description of Modification or Repair

The hybrid system software will be updated FREE OF CHARGE. For customer satisfaction, if the vehicle has experienced an inverter failure with certain hybrid system faults related to this condition, the inverter assembly will be repaired or replaced FREE OF CHARGE.

3. Owner's Name and Address

Toyota uses lists and addresses provided by IHS Markit and, when there is no IHS data available, Toyota will use internal company sales lists to notify owners of affected vehicles.

4. Eligibility for Repair

Any authorized Toyota dealer will update the hybrid system software FREE OF CHARGE.

5. Owner Procedure

The notification will include a recommendation that the owners contact any authorized Toyota dealer to schedule an appointment to have the remedy performed as soon as possible.

6. Performance of Repair

The software update will take approximately 45 minutes to complete. If the inverter needs to be repaired or replaced, the repair could take up to 7.5 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

7. Letter of Notification to Owners

Toyota sent an owner notification by first class mail starting on July 24, 2020, advising owners to make an appointment with their authorized Toyota dealer.

8. Parts Supply

Toyota confirmed that an adequate supply of parts is available.

9. Repair Instructions

A copy of the **TI** for safety recall campaign 20TA10 is attached.

10. Impact on Fuel Consumption, Drivability and Safety

This repair will not affect fuel economy, drivability and/or safety. This repair will address the safety defect that we notified NHTSA about on June 24, 2020.

11. Completion Label

Completed vehicles will be tracked through the Toyota Technical Information System (TIS).

TOYOTA

Toyota Motor Engineering & Manufacturing North America, Inc.

Vehicle Safety & Compliance
Liaison Office
Mail Stop: W4-2D
6565 Headquarters Drive
Plano, TX 75024

June 24, 2020

DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Corporation ["TMC"]
1, Toyota-cho, Toyota-city, Aichi-pref., 471-8571, Japan

Affiliated U.S. Sales Company:

Toyota Motor North America, Inc. ["TMNA"]
6565 Headquarters Drive, Plano, TX 75024

Manufacturer of Hybrid Control ECU:

DENSO CORPORATION
1-1, Showa-cho, Kariya-city, Aichi, 448-8661, Japan
Telephone: + 81-566-25-5511

DENSO TEN Limited
2-28, Gosho-dori 1-chome, Hyogo-ku, Kobe-city, Hyogo, 652-8510, Japan
Phone: +81-78-671-5081

Country of Origin: Japan

2. Identification of Involved Vehicles:

Make/Car Line	Model Year	Manufacturer	Production Period
Toyota / Prius	2013-2015	TMC	March 15, 2013 through November 9, 2015
Toyota / Prius *v*	2014-2017		June 20, 2014 through November 30, 2017

Applicability	Part Number	Part Name	Component Description
MY2013-2015 Toyota Prius	89681-47440 89681-47441 89681-47250 89681-47251	Computer, Power Management Control	Hybrid Control ECU
MY2014-2017 Toyota Prius *v*	89681-47030 89681-47422 89981-47630	Computer, Power Management Control Computer, Hybrid Vehicle Control (2017MY)	

NOTE: (1) Although the involved vehicles are within the above production period, not all vehicles in this range were sold in the U.S.
(2) Other Toyota or Lexus vehicles do not use the same hybrid control ECU and software as the involved vehicles or are involved in Safety Recall 18V-684.

3. Total Number of Vehicles Potentially Involved:

Prius : 204,835
Prius *v* : 61,802
Total : 266,637

4. Percentage of Vehicles Estimated to Actually Contain the Defect:

Unknown. Toyota is unable to provide an estimate of the percentage of vehicles to actually contain the defect. Whether the issue in each case will lead to damage of the transistor within the inverter assembly and subsequently lead to a shutdown of the hybrid system, creating an unreasonable risk to safety, depends on each vehicle's operating conditions.

5. Description of Problem:

The subject vehicles were not involved in Safety Recall 18V-684 because they were originally equipped with a version of the software, used to control the boost converter in the Intelligent Power Module (IPM) within the inverter assembly of the vehicle's hybrid system, that contains improved thermal management. Repeated driving under certain identified high-load driving patterns (e.g., from a stop, applying nearly full throttle and then gradually further accelerating to full throttle) could cause higher thermal stress in specific transistors in the IPM, resulting in damage to those transistors over time. This can lead to illumination of various warning lights and the display of a warning message on the instrument panel. In cases where a specific transistor fails in a certain way during a high-load driving condition, such as during hard acceleration, there is a possibility for an abnormally high voltage to be generated that could

exceed a certain limit in the software and IPM circuit design causing the hybrid system to shut down instead of entering a failsafe driving mode that would provide reduced motive power and allow the vehicle to be driven for certain distances. In this condition, power steering and braking will not be affected. However, a hybrid system that shuts down without entering a failsafe mode could result in the vehicle losing motive power while driving at higher speeds, increasing the risk of a crash.

6. Chronology of Principal Events:

October 2018

On October 4, 2018, Toyota filed Safety Recall 18V-684, which did not include the subject vehicles. Because the subject vehicles contained the improved thermal management logic when new, Toyota judged that it was unlikely that they would be affected by the condition in that recall. However, Toyota continued monitoring the field information for the subject vehicles and collecting field parts for analysis.

August 2019 - January 2020

By this time, Toyota had recovered a number of inverter assemblies from the subject vehicles from the U.S market indicating potential hybrid inverter failure. Toyota investigated the recovered inverter assemblies and found certain damaged transistors in the IPM. However due to extent of the damage, the cause of the damage was not able to be identified.

As the field cases, up to this point, occurred predominantly in North America, Toyota hypothesized that there could be a previously unknown difference in the driving conditions in North America that could explain the different field experience in North America.

Thus, Toyota sought to compare the driving conditions between Japan and North America. To do so, Toyota collected and analyzed driving data from a number of vehicles that were of another Toyota hybrid model, capable of communicating driving data wirelessly, that is sold in both regions. (As the subject Prius and Prius *v* vehicles are not capable of communicating driving data wirelessly, a different hybrid model was used.) Through this data, Toyota identified that there are potential differences between Japan and North America, in terms of vehicle speed and accelerator pedal application angle, under certain driving conditions, e.g., accelerator application patterns used to achieve rapid acceleration from very low speed.

Based on these findings, Toyota began testing to understand the potential effects of this type of driving pattern (where full throttle is applied from a stop) on the relevant transistors in the subject vehicles. In parallel, in order to determine whether the driving patterns observed from the other hybrid model are similar to the driving patterns of Prius and Prius *v* drivers who have experienced these transistor failures, Toyota began collecting driving data from some customers who previously experienced this type of transistor failure by installing a recording device with the customer's permission.

February 2020 – Early-June 2020

At this time, Toyota concluded the aforementioned testing to understand the potential effects on these transistors in the subject vehicles when they are exposed to a driving pattern where full throttle is applied from a stop. In this testing, temperature in the transistors for the boost converter did not increase to a point which could cause damage to the transistors.

Based on this result, Toyota believed that there may be further differences in the driving pattern which could contribute to generating a higher temperature in these transistors. Based on closer analysis of the driving data of the Prius customers who agreed to have a recording device installed, it was found that the unique driving pattern from these customers was not an application of full throttle from a stop. Instead it was a pattern where, from a stop, the driver would apply the accelerator pedal rapidly up to approximately two third opening position and then gradually further accelerate to full throttle.

Further testing and analysis were conducted using this newly identified driving pattern and similar driving patterns. This revealed that if the driver applies nearly full throttle from a stop and then gradually further accelerates to full throttle, the temperature generated in transistors for the boost converter could increase unexpectedly, beyond the levels created under prior testing where full throttle is applied directly from a stop.

Throughout this investigation, Toyota was also able to collect data from some vehicles that potentially experienced hybrid inverter failure that was retrieved when the vehicle was serviced by a dealer (i.e., freeze frame data contained within the hybrid control ECU). At this time, Toyota was able to complete its detailed review and analysis of the available freeze frame data. Through this analysis, Toyota identified eight data records that indicated that the hybrid system in a subject vehicle shut down instead of entering a failsafe driving mode due to an abnormally high voltage being generated.

Based on a result of the investigation above, it was found that, in spite of the improved thermal management logic in the software that was originally equipped in the subject vehicles, thermal damage could occur in certain transistors if the vehicle is exposed to repeated driving under certain identified high-load driving patterns over time. In cases where a specific transistor fails in a certain way during a high-load driving condition, such as during hard acceleration, a large counter-electromotive voltage could be generated by the motor/generator at a capacitor within the IPM. This large voltage, higher than the system limit, could be generated by the increase in RPM of the internal combustion engine and the motor generator attached to the engine. If this were to occur, the hybrid system could shutdown, by design, in order to protect the system from electrical damage. In this condition, power steering and braking will not be affected. However, a hybrid system that shuts down without entering a failsafe mode could result in the vehicle losing motive power while driving at higher speeds, increasing the risk of a crash.

June 18, 2020

Toyota decided to conduct a voluntary safety recall campaign.

As of June 10, 2020, based on a diligent review of records, Toyota's best engineering judgment is that there is one Toyota Field Technical Report and there are seven warranty claims that have been received from U.S. sources that relate to the condition investigated in this chronology and which were considered in the decision to submit this report.

7. Description of Corrective Repair Action:

To address the safety defect, all known owners of the subject vehicles will be notified by first class mail to return their vehicles to a Toyota dealer to have a software update for the hybrid system performed at no cost.

For customer satisfaction, if the vehicle has experienced an inverter failure with certain hybrid system faults related to this condition, the inverter assembly will be repaired or replaced, prior to software update, at no cost.

Reimbursement Plan for pre-notification remedies

The owner letter will instruct vehicle owners who have paid to have this condition remedied prior to this campaign to seek reimbursement pursuant to Toyota's General Reimbursement Plan.

8. Recall Schedule:

Notifications to owners will be sent by August 23, 2020. A copy of the draft owner notification will be submitted as soon as it is available.

9. Distributor/Dealer Notification Schedule:

Notifications to distributors/dealers will be sent by June 24, 2020. Copies of dealer communications will be submitted as they are issued.

10. Manufacturer's Campaign Number:

[Interim / Remedy] 20TB10 / 20TA10

TOYOTA-DIR-20200714

TOYOTA

Toyota Motor North America, Inc.
1588 Woodridge Avenue
Ann Arbor, Michigan 48105

July 14, 2020

EDIR-VERR Coordinator
Compliance Division
U.S. Environmental Protection agency
2000 Traverwood Drive
Ann Arbor, Michigan 48105

Re: Submission of Emissions Defect Information Report for Certain 2013-2015 Model Year (MY) Toyota Prius vehicles and 2014-2017MY Toyota Prius V vehicles Inverter

Pursuant to the requirements outlined in Part 85 (Subpart T) of 40CFR, we are providing an Emissions Defect Information Report (EDIR) on the model listed in paragraph 3 of this Defect Report. The subject vehicles were not involved in Safety Recall J0V because they were originally equipped with a version of the software, used to control the boost converter in the Intelligent Power Module (IPM) within the inverter assembly of the vehicle's hybrid system, that contains improved thermal management. Repeated driving under certain identified high-load driving patterns (e.g., from a stop, applying nearly full throttle and then gradually further accelerating to full throttle) could cause higher thermal stress in specific transistors in the IPM, resulting in damage to those transistors over time. On June 24, 2020, Toyota filed the attached Defect Information Report (DIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall 20TA10. Attached are also Field Fixes #15-TF-37, 14-TF-48, 13-TF-60 submitted on October 30, 2018, and #18-TF-59, 17-TF-66, 16-TF-95 and 15-TF-48 submitted on June 24, 2020 regarding to this concern for our reference.

If you have any questions regarding this matter, please contact Mr. Arvon Mitcham of my staff at (734) 995-5587 or email: arvon.mitcham@toyota.com.

Sincerely,

William Meschievitz
Group Manager
Powertrain Certification and Compliance

cc: Mr. Allen Lyons Chief, California Air Resources Board – Emissions Certification and Compliance Division

TOYOTA-DIR-20200714

1. Manufacturer's Corporate Name
Toyota Motor Corporation
1, Toyota-Cho, Toyota-City
Aichi, 471-8571, JAPAN

Affiliated U.S. Importing Company
Toyota Motor North America, Inc
6565 Headquarters Drive
Plano, TX 75024, U.S.A

2. Description of the Defect

The subject vehicles were not involved in Safety Recall J0V because they were originally equipped with a version of the software, used to control the boost converter in the Intelligent Power Module (IPM) within the inverter assembly of the vehicle's hybrid system, that contains improved thermal management. Repeated driving under certain identified high-load driving patterns (e.g., from a stop, applying nearly full throttle and then gradually further accelerating to full throttle) could cause higher thermal stress in specific transistors in the IPM, resulting in damage to those transistors over time. This can lead to illumination of various warning lights and the display of a warning message on the instrument panel. In cases where a specific transistor fails in a certain way during a high-load driving condition, such as during hard acceleration, there is a possibility for an abnormally high voltage to be generated that could exceed a certain limit in the software and IPM circuit design causing the hybrid system to shut down instead of entering a failsafe driving mode that would provide reduced motive power and allow the vehicle to be driven for certain distances. In this condition, power steering and braking will not be affected. However, a hybrid system that shuts down without entering a failsafe mode could result in the vehicle losing motive power while driving at higher speeds, increasing the risk of a crash.

3. Description of Vehicles Potentially Affected

Make(s)	*Model Year(s)*	*Model(s)*	*Test Group(s)*	*Engine(s)*	*Approximately Potentially Affected Vehicles*
Toyota	2013	Prius	DTYXV01.8HC3	2ZR-FXE	10
Toyota	2014	Prius	ETYXV01.8HC3	2ZR-FXE	60,559
Toyota	2014	Prius V	ETYXV01.8CCU	2ZR-FXE	10,313
Toyota	2015	Prius	FTYXV01.8HC3	2ZR-FXE	144,266
Toyota	2015	Prius V	FTYXV01.8CCU	2ZR-FXE	22,659
Toyota	2016	Prius V	GTYXV01.8PCU	2ZR-FXE	13,099
Toyota	2017	Prius V	HTYXV01.8P3U	2ZR-FXE	15,731

4. Number of the Affected Vehicles and the Address of the Plants at Which the Affected Vehicles Were Produced

(1) Number of affected vehicles
Approximately 266,637 units

(2) Addresses of the Manufacturing Plant
Toyota Motor Corporation, Takaoka Plant
1 Sanko, Honda-Cho, Toyota-City, Aichi, Japan

Toyota Motor Corporation Tsutsumi Plant
1, Umanokashira, Tsutsumi-Cho, Toyota-City, Aichi, Japan

5. Evaluation of Emissions Impact and Description of Drivability Problems

Emissions Impact:	Emissions Impact is not expected.
Drivability Impact:	Drivability will be impacted if the vehicle enters a failsafe driving mode or there is a hybrid system shut down due to this condition.
Fuel Economy Impact:	Fuel Economy impact will be minimal in the case of a hybrid system shutdown or in the case of the vehicle entering a failsafe driving mode where power will be restricted.

6. Emission Data Related to the Defect

There is no emission data available at this time.

7. Anticipated Manufacturer Follow-up

Safety Recall Campaign 20TA10

Field Fixes #15-TF-37, 14-TF-48, 13-TF-60 submitted on October 30, 2018

#18-TF-59, 17-TF-66, 16-TF-95, 15-TF-48 submitted on June 24, 2020

TOYOTA

Toyota Motor North America, Inc.
1630 W. 186th St.
Gardena, CA 90248
(310) 787-5500

October 30, 2018

TTC-18115

Ms. Annette Hebert
Chief, ECARS Division
California Air Resources Board
9480 Telstar Avenue, Suite 4
El Monte, CA 91731

SUBJECT: **Submission of Field Fixes 15-TF-37, 14-TF-48, 13-TF-60, 12-TF-72, 11-TF-68 and 10-TF-90**

Dear Ms. Hebert:

In accordance with the provisions of 40 CFR§86.1842-01 and §86.1844-01(f), Toyota is providing for review the subject Field Fixes for the following test groups:

MYs	F/F	Test Groups	Models	Engine
2015	15-TF-37	FTYXV01.8HC3	Prius	2ZR-FXE
2014	14-TF-48	ETYXV01.8HC3	Prius	
		ETYXV01.8CCU	Prius v	
2013	13-TF-60	DTYXV01.8HC3	Prius	
		DTYXV01.8CCU	Prius v	
2012	12-TF-72	CTYXV01.8HC3	Prius	
		CTYXV01.8CCU	Prius v	
2011	11-TF-68	BTYXV01.8HC3	Prius	
2010	10-TF-90	ATYXV01.8HC3	Prius	

The purpose of these Field Fixes is to maintain vehicle driving performance when inverter malfunction occurs. (OBD-related)

The following information is attached for review:

- Explanation of Field Fixes
- Revised Application Pages (Applicable to 10MY-15MY Application)

If you have any questions regarding this matter, please contact Mort Smith of our office at 310/787-5647 or email him at: mort.smith@toyota.com.

Sincerely,

Kevin D. Webber
Director
Product Regulatory Affairs

attachment

CC: Mr. Yong Yu

Explanation of Field Fixes 15-TF-37, 14-TF-48, 13-TF-60, 12-TF-72, 11-TF-68 and 10-TF-90

1. Applicability

MYs	F/F	Test Groups	Models	Engine
2015	15-TF-37	FTYXV01.8HC3	Prius	2ZR-FXE
2014	14-TF-48	ETYXV01.8HC3	Prius	
		ETYXV01.8CCU	Prius v	
2013	13-TF-60	DTYXV01.8HC3	Prius	
		DTYXV01.8CCU	Prius v	
2012	12-TF-72	CTYXV01.8HC3	Prius	
		CTYXV01.8CCU	Prius v	
2011	11-TF-68	BTYXV01.8HC3	Prius	
2010	10-TF-90	ATYXV01.8HC3	Prius	

2. Purpose

The purpose of these Field Fixes is to maintain vehicle driving performance when inverter malfunction occurs. (OBD-related)

3. Contents of Modification

The subject vehicles contain software used to control the Intelligent Power Module (IPM) within the inverter assembly, a part of the vehicle's hybrid system. If a specific transistor within the IPM fails in a certain way during a high-load driving condition, such as during hard acceleration, there is a possibility for an abnormally high voltage to be generated that could exceed a certain limit in the software and IPM circuit design. If this abnormally high voltage is generated, there is the possibility that the hybrid system could shut down instead of entering a failsafe driving mode that would provide reduced motive power and allow the vehicle to be driven for certain distances. To address this issue, Toyota will update the Hybrid Control Module's (HCM) software through a field action (safety recall). In addition, the new software will support a further enhancement to the failsafe driving modes to provide for increased available speed and range under more circumstances in the event of a failure requiring failsafe driving.

Later Model Year (MY) 2014 Prius and MY 2015 Prius vehicles are not covered by the field action (safety recall) to update the software. However, if HCM replacement is necessary in the field for other reasons in these Prius vehicles, an HCM containing the new software will be installed due to parts commonization. Therefore, the 2015MY Prius is included in this Field Fix.

4. Effect on Emissions

Toyota judges that these modifications have no impact on emissions or fuel economy.

5. Parts List

Part name: ***Hybrid Control Module***

Model	MYs	Part numbers		Calibration IDs	
		Before	After	Before	After
Prius	2015, 2014	89681-47252	89681-47253	896B34747200	896B34747300
	2013	89681-47443	89681-47444	896B34736300	896B34736400
	2012	89681-47304	89681-47305	896B34720400	896B34720500
	2011	89681-47216	89681-47217	896B34714600	896B34714700
	2010	89681-47089	89681-47380	896B34701900	896B34732000

Model	MYs	Part numbers		Calibration IDs	
		Before	After	Before	After
Prius v	2014	89681-47422	89681-47423	896B34727300	896B34761100
	2013				
	2012	89681-47183	89681-47184	896B34764000	896B34761100
		89681-47342	89681-47343	896B34761000	896B34761100

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07E8	89661-47590	34754000	54E1AA13	Main
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07E8	89661-47591	34754100	2D6958A5	Main
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07E8	89661-47592	34754200	A383CB7A	Main Field Fix 15-TF-02
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 15-TF-02
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07EA	89681-47251	896B34747100	35B5F9D9	Main
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07EA	89681-47252	896B34747200	6F4ACF60	Main Field Fix 15-TF-06
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Field Fix 15-TF-06
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07EA	89681-47253	896B34747300	TBD	Main Field Fix 15-TF-37
2015	TOYOTA	PRIUS	1.8	A/T	FTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Field Fix 15-TF-37

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07E8	89661-47590	34754000	54E1AA13	Main
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07E8	89661-47591	34754100	2D6958A5	Main Running Change 14-TR-29
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Running Change 14-TR-29
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07E8	89661-47592	34754200	A383CB7A	Main Field Fix 14-TF-28
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 14-TF-28
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA	89681-47250	896B34747000	2DADD1A1	Main
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA	89681-47251	896B34747100	35B5F9D9	Main Running Change 14-TR-18
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Running Change 14-TR-18
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA	89681-47252	896B34747200	6F4ACF60	Main Field Fix 14-TF-31
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Field Fix 14-TF-31
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA	89681-47253	896B34747300	TBD	Main Field Fix 14-TF-48
2014	TOYOTA	PRIUS	1.8	A/T	ETYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Field Fix 14-TF-48

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07E8	89661-47560	34751000	8D3140F7	Main
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07E8	89661-47561	34751100	2EE83BA9	Main Running Change 14-TR-29
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Running Change 14-TR-29
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07E8	89661-47562	34751200	F0E25EFE	Main Field Fix 14-TF-28
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 14-TF-28
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07EA	89681-47421	896B34727200	975DD67D	Main
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07EA		896B54712000	18E210AC	Sub
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07EA	89681-47422	896B34727300	26DDC41D	Main Running Change 14-TR-22
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07EA		896B54712000	18E210AC	Sub Running Change 14-TR-22
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07EA	89681-47423	896B34761100	TBD	Main Running Change 14-TF-48
2014	TOYOTA	PRIUS v	1.8	A/T	ETYXV01.8CCU	$07EA		896B54712000	18E210AC	Sub Running Change 14-TF-48
2014	TOYOTA	CT 200h	1.8	A/T	ETYXV01.8CCU	$07E8	89661-76080	37608000	5F92CD24	Main
2014	TOYOTA	CT 200h	1.8	A/T	ETYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub
2014	TOYOTA	CT 200h	1.8	A/T	ETYXV01.8CCU	$07E8	89661-76081	37608100	5DE99AF0	Main Field Fix 14-TF-28
2014	TOYOTA	CT 200h	1.8	A/T	ETYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 14-TF-28
2014	TOYOTA	CT 200h	1.8	A/T	ETYXV01.8CCU	$07EA	89681-76150	896B37613000	BB6E68FC	Main
2014	TOYOTA	CT 200h	1.8	A/T	ETYXV01.8CCU	$07EA		896B57603000	900D42CC	Sub

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8	89661-47190	34734000	03C64B87	Main
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8	89661-47191	34734100	FBD7EEB5	Main Running Change 13-TR-22
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Running Change 13-TR-22
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8	89661-47192	34734200	8C2B050E	Main Field Fix 13-TF-24
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-24
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8	89661-47193	34734300	E18D1361	Main Field Fix 13-TF-46
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-46
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8	89661-47194	34734400	E6C2C643	Main Field Fix 13-TF-48
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-48
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA	89681-47440	896B34736000	72AA1864	Main
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA	89681-47441	896B34736100	5C71B512	Main Running Change 13-TR-25
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Running Change 13-TR-25
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA	89681-47442	896B34736200	56A922F1	Main Field Fix 13-TF-14
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Field Fix 13-TF-14
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA	89681-47443	896B34736300	75A7DA3F	Main Field Fix 13-TF-51
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Field Fix 13-TF-51
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA	89681-47444	896B34736400	TBD	Main Field Fix 13-TF-60
2013	TOYOTA	PRIUS	1.8	A/T	DTYXV01.8HC3	$07EA		896B57602000	AE0CAB38	Sub Field Fix 13-TF-60

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8	89661-47361	34725100	24A900CA	Main
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8	89661-47362	34725200	6040A0B4	Main Running Change 13-TR-22
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Running Change 13-TR-22
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8	89661-47363	34725300	F78DB2D4	Main Field Fix 13-TF-24
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-24
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8	89661-47364	34725400	F6AE3E88	Main Field Fix 13-TF-46
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-46
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8	89661-47365	34725500	EA3ABACF	Main Field Fix 13-TF-48
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-48
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA	89681-47420	896B34727100	89337E62	Main
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA		896B54712000	18E210AC	Sub
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA	89681-47421	896B34727200	975DD67D	Main Running Change 13-TR-25
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA		896B54712000	18E210AC	Sub Running Change 13-TR-25
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA	89681-47422	896B34727300	26DDC41D	Main Field Fix 13-TF-18
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA		896B54712000	18E210AC	Sub Field Fix 13-TF-18
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA	89681-47423	896B34761100	TBD	Main Field Fix 13-TF-60
2013	TOYOTA	PRIUS v	1.8	A/T	DTYXV01.8CCU	$07EA		896B54712000	18E210AC	Sub Field Fix 13-TF-60
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8	89661-76011	37601100	5AFEF421	Main
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8	89661-76012	37601200	F69B9274	Main Running Change 13-TR-22
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Running Change 13-TR-22
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8	89661-76013	37601300	EE7E1567	Main Field Fix 13-TF-46
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-46
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8	89661-76014	37601400	BCAC6172	Main Field Fix 13-TF-48
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 13-TF-48

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07EA	89681-76060	896B37606000	6DE3DDB9	Main
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07EA		896B57602000	AE0CAB38	Sub
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07EA	89681-76061	896B37606100	6C3CDFB1	Main Running Change 13-TR-23
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07EA		896B57602000	AE0CAB38	Sub Running Change 13-TR-23
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07EA	89681-76062	896B37606200	B4C292F2	Main Field Fix 13-TF-32
2013	TOYOTA	CT 200h	1.8	A/T	DTYXV01.8CCU	$07EA		896B57602000	AE0CAB38	Sub Field Fix 13-TF-32

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8	89661-47190	34734000	03C64B87	Main For Job#1 Running Change 12-TR-05
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub For Job#1 Running Change 12-TR-05
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8	89661-47191	34734100	FBD7EEB5	Main Field Fix 12-TF-15
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-15
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8	89661-47192	34734200	8C2B050E	Main Field Fix 12-TF-40
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-40
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8	89661-47193	34734300	E18E1161	Main Field Fix 12-TF-56
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-56
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8	89661-47194	34734400	EEC2C643	Main Field Fix 12-TF-59
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-59

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA	89681-47300	896B34720000	7B1FAE75	Main
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA		896B54708000	7D7403F9	Sub
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA	89681-47301	896B34720100	DBE90BD9	Main Running Change 12-TR-21
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA		896B54708000	7D7403F9	Sub Running Change 12-TR-21
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA	89681-47302	896B34720200	DD870998	Main Running Change 12-TR-35
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA		896B54708000	7D7403F9	Sub Running Change 12-TR-35
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA	89681-47303	896B34720300	644FCBA5	Main Field Fix 12-TF-31
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA		896B54708000	7D7403F9	Sub Field Fix 12-TF-31
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA	89681-47304	896B34720400	2C9B666E	Main Field Fix 12-TF-64
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA		896B54708000	7D7403F9	Sub Field Fix 12-TF-64
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA	89681-47305	896B34720500	TBD	Main Field Fix 12-TF-72
2012	TOYOTA	Prius	1.8	A/T	CTYXV01.8HC3	$07EA		896B54708000	7D7403F9	Sub Field Fix 12-TF-72

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8	89661-47360	34725000	86D5CAB5	Main
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8	89661-47361	34725100	24A900CA	Main Running Change 12-TR-04
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Running Change 12-TR-04
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8	89661-47362	34725200	6040A0B4	Main Field Fix 12-TF-15
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-15
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8	89661-47363	34725300	F78DB2D4	Main Field Fix 12-TF-40
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-40
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8	89661-47364	34725400	F6AE3E88	Main Field Fix 12-TF-56
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-56
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8	89661-47365	34725500	EA3ABACF	Main Field Fix 12-TF-59
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 12-TF-59

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47180	896B34711000	BD9FB164	Main
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54705000	001EA7B0	Sub
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47181	896B34711100	AF4002CC	Main
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54705100	BACE10C0	Sub
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47182	896B34727100	89337E62	Main Running Change 12-TR-38
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54705100	BACE10C0	Sub Running Change 12-TR-38
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47183	896B34764000	5FF5BD34	Main Field Fix 12-TF-57
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54705100	BACE10C0	Sub Field Fix 12-TF-57
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47184	896B34761100	TBD	Main Field Fix 12-TF-72
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54705100	BACE10C0	Sub Field Fix 12-TF-72
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47340	896B34727000	9362B004	Main Running Change 12-TR-23
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54709000	182E1060	Sub Running Change 12-TR-23
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47341	896B34727100	89337E62	Main Running Change 12-TR-35
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54709000	182E1060	Sub Running Change 12-TR-35
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47342	896B34761000	23F6C136	Main Field Fix 12-TF-57
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54709000	182E1060	Sub Field Fix 12-TF-57
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA	89681-47343	896B34761100	TBD	Main Field Fix 12-TF-72
2012	TOYOTA	Prius v	1.8	A/T	CTYXV01.8CCU	$07EA		896B54709000	182E1060	Sub Field Fix 12-TF-72

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8	89661-47390	34728000	3B100020	Main
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8	89661-47391	34728100	2E8B3C74	Main Running Change 11-TR-39
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Running Change 11-TR-39
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8	89661-47392	34728200	11E30C09	Main Field Fix 11-TF-38
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 11-TF-38
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8	89661-47393	34728300	829A817F	Main Field Fix 11-TF-49
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 11-TF-49
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8	89661-47394	34728400	DC0917C4	Main Field Fix 11-TF-58
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 11-TF-58
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8	89661-47395	34728500	EBF44D59	Main Field Fix 11-TF-60
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 11-TF-60

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47210	896B34714000	C33DAFC0	Main
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47211	896B34714100	FBD948DD	Main Running Change 11-TR-27
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Running Change 11-TR-27
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47212	896B34714200	CCEBB718	Main Running Change 11-TR-33
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Running Change 11-TR-33
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47213	896B34714300	6779E726	Main Field Fix 11-TF-16
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 11-TF-16
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47214	896B34714400	50578E9F	Main Field Fix 11-TF-25
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 11-TF-25
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47215	896B34714500	136E9772	Main Field Fix 11-TF-45
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 11-TF-45
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47216	896B34714600	5B64AF93	Main Field Fix 11-TF-64
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 11-TF-64
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA	89681-47217	896B34714700	TBD	Main Field Fix 11-TF-68
2011	TOYOTA	Prius	1.8	A/T	BTYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 11-TF-68

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47260	34715000	0AC66A3A	Main
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47261	34715100	1E927B3A	Main
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47262	34715200	2E91499F	Main Running Change 10-TR-20
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Running Change 10-TR-20
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47263	34715300	F47D4022	Main Field Fix 10-TF-27
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 10-TF-27
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47264	34715400	6F07F39D	Main Field Fix 10-TF-59
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 10-TF-59
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47265	34715500	EAC146A1	Main Field Fix 10-TF-71
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 10-TF-71
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47266	34715600	CA016D85	Main Field Fix 10-TF-80
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 10-TF-80
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8	89661-47267	34715700	4772AF79	Main Field Fix 10-TF-82
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07E8		A4701000	611F6EF2	Sub Field Fix 10-TF-82

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47080	896B34701000	990528F0	Main
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701000	07201B82	Sub
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47081	896B34701100	7EFAECAB	Main
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701000	07201B82	Sub
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47082	896B34701200	68E6EC17	Main Running Change 10-TR-29
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701000	07201B82	Sub Running Change 10-TR-29
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47083	896B34701300	C43386AD	Main Running Change 10-TR-33
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701000	07201B82	Sub Running Change 10-TR-33
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47084	896B34701400	D6A04F3B	Main Field Fix 10-TF-10
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 10-TF-10
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47085	896B34701500	C2040956	Main Field Fix 10-TF-15
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 10-TF-15
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47086	896B34701600	82388A6D	Main Field Fix 10-TF-40
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 10-TF-40
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47087	896B34701700	794B3BBB	Main Field Fix 10-TF-48
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 10-TF-48
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47088	896B34701800	79E0EDC6	Main Field Fix 10-TF-66
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 10-TF-66
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47089	896B34701900	BDE94532	Main Field Fix 10-TF-86
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 10-TF-86
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA	89681-47380	896B34732000	TBD	Main Field Fix 10-TF-90
2010	TOYOTA	Prius	1.8	A/T	ATYXV01.8HC3	$07EA		896B54701100	B5A5D17C	Sub Field Fix 10-TF-90

Issued: 12/01/2009 10-TR-29:10/19/2009 10-TR-33:12/21/2009 10-TF-10:10/18/2010 10-TF-15:01/20/2011 10-TF-40:02/13/2012 10-TF-48:06/21/2012 10-TF-66:01/29/2014 10-TF-86:11/19/2015 10-TF-90:10/31/2018

TOYOTA

PROTECTED 関係者外秘

Toyota Motor North America, Inc.
1630 W. 186th St.
Gardena, CA 90248
(310) 787-5500

June 25, 2020

Mr. Allen Lyons, Chief
Emissions Certification and Compliance Division
California Air Resources Board
9480 Telstar Ave., Suite 4
El Monte, CA 91731

Dear Mr. Lyons:

SUBJECT: Submission of Field Fixes 18-TF-59, 17-TF-66, 16-TF-95 and 15-TF-48 <Revision>

In accordance with the provisions of 40 CFR§86.1842-01, §86.1843-01(e)(f), and §86.1844-01(f); Toyota is providing for review the subject Field Fixes for the following test groups:

MY	F/F	Test Group	Model	Engine
2018	18-TF-59	JTYXV01.8P3U	Prius v	2ZR-FXE
2017	17-TF-66	HTYXV01.8P3U		
2016	16-TF-95	GTYXV01.8PCU		
2015	15-TF-48	FTYXV01.8CCU		

The purpose of this Running Change is to maintain vehicle driving performance when inverter malfunction occurs. ~~(OBD-related)~~ <Revision>(Non-OBD)

The following information is attached for review:

- Explanation of Field Fixes
- Revised Application Pages

If you have any questions regarding this matter, please contact Mike Lord of our office at 310.787.5644 or email: michael.lord@toyota.com.

Sincerely,

Kevin D. Webber

Kevin D. Webber
General Manager
Sustainability & Regulatory Affairs

attachments

Explanation of Field Fixes 18-TF-59, 17-TF-66, 16-TF-95 and 15-TF-48 <Revision>

1. Applicability

MY	F/F	Test Group	Model	Engine
2018	18-TF-59	JTYXV01.8P3U	Prius v	2ZR-FXE
2017	17-TF-66	HTYXV01.8P3U		
2016	16-TF-95	GTYXV01.8PCU		
2015	15-TF-48	FTYXV01.8CCU		

2. Purpose

The purpose of this Running Change is to maintain vehicle driving performance when inverter malfunction occurs. ~~(OBD-related)~~ <Revision>(Non-OBD)

3. Contents of Modification

As previously described in the letter of ~~15-TF-44, 14-TF-53, 13-TF-65 and 12-TF-77~~ 15-TF-37, 14-TF-48, 13-TF-60, 12-TF-72, 11-TF-68 and 10-TF-90, which was submitted in ~~Nov~~Oct, ~~2019~~2018, the subject vehicles contain software used to control the Intelligent Power Module (IPM) within the inverter assembly, a part of the vehicle's hybrid system. If a specific transistor within the IPM fails in a certain way during a high-load driving condition, such as during hard acceleration, there is a possibility for an abnormally high voltage to be generated that could exceed a certain limit in the software and IPM circuit design. If this abnormally high voltage is generated, there is the possibility that the hybrid system could shut down instead of entering a fail-safe driving mode that would provide reduced motive power and allow the vehicle to be driven for certain distances. To address this issue, Toyota will update the Hybrid Control Module's (HCM) software through a field action (safety recall). In addition, the new software will support a further enhancement to the fail-safe driving modes to provide for increased available speed and range under more circumstances in the event of a failure requiring fail-safe driving.

4. Effect on Emissions and Fuel Economy

Toyota judges that these modifications have no impact on emissions or fuel economy.

5. Parts List

Part name: ***Hybrid Control Module***

Engine	Model	MY	Part Numbers		Calibration ID (Main)	
			Before	After	Before	After
2ZR-FXE	Prius v	2018	89981-47230	89981-47231	899834740000 899856201000	899834740100 899856201000
		2017	89981-47630	89981-47631	899834753000 899856201000	899834753100 899856201000
		2016 2015	89681-47030	89681-47031	896B34755000 896B54716000	896B34755100 896B54716000

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2015	TOYOTA	CT 200h	1.8	A/T	FTYXV01.8CCU	$07E8	89661-76160	37616000	1A10A330	Main
2015	TOYOTA	CT 200h	1.8	A/T	FTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub
2015	TOYOTA	CT 200h	1.8	A/T	FTYXV01.8CCU	$07E8	89661-76161	37616100	79BD7B02	Main Field Fix 15-TF-02
2015	TOYOTA	CT 200h	1.8	A/T	FTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 15-TF-02
2015	TOYOTA	CT 200h	1.8	A/T	FTYXV01.8CCU	$07EA	89681-76200	896B37617000	BF17E9F8	Main
2015	TOYOTA	CT 200h	1.8	A/T	FTYXV01.8CCU	$07EA		896B57603000	900D42CC	Sub
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07E8	89661-47630	34758000	335A8E23	Main
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07E8	89661-47631	34758100	E6FAA806	Main Field Fix 15-TF-02
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07E8		A4701000	611F6EF2	Sub Field Fix 15-TF-02
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07EA	89681-47030	896B34755000	A95152B7	Main
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07EA		896B54716000	25D94C78	Sub
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07EA	89681-47031	896B34755100	B32A0067	Main Field Fix 15-TF-44, 15-TF-48
2015	TOYOTA	PRIUS v	1.8	A/T	FTYXV01.8CCU	$07EA		896B54716000	25D94C78	Sub Field Fix 15-TF-44, 15-TF-48

1.02.00 Engine Control Module (ECM), Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Module ID	ECM	CAL ID	CVN	Note
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07E8	89661-76160	37616000	1A10A330	Main
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07E8		A4701000	611F6EF2	Sub
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07E8	89661-76161	37616100	79BD7B02	Main Running Change 16-TR-07
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07E8		A4701000	611F6EF2	Sub Running Change 16-TR-07
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA	89681-76270	896B37623000	DC9A323B	Main
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA		896B57603000	900D42CC	Sub
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA	89681-76271	896B37623100	0A27540F	Main Running Change 16-TR-13
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA		896B57603000	900D42CC	Sub Running Change 16-TR-13
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07E8	89661-47630	34758000	335A8E23	Main
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07E8		A4701000	611F6EF2	Sub
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07E8	89661-47631	34758100	E6FAA806	Main Running Change 16-TR-07
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07E8		A4701000	611F6EF2	Sub Running Change 16-TR-07
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA	89681-47030	896B34755000	A95152B7	Main
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA		896B54716000	25D94C78	Sub
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA	89681-47031	896B34755100	TBD	Main Field Fix 16-TF-95
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA		896B54716000	25D94C78	Sub Field Fix 16-TF-95
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA	Included in PCU	898844708200	6DDD03A4	MG Control Module(1MG-CPU)
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA		898844709200	DA6CB756	MG Control Module(2MG-CPU)
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA	Included in PCU	898844708300	1686932C	MG Control Module(1MG-CPU) Field Fix 16-TF-92
2016	TOYOTA	CT 200h	1.8	A/T	GTYXV01.8PCU	$07EA		898844709200	DA6CB756	MG Control Module(2MG-CPU)
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA	Included in PCU	898844712300	E61A6C89	MG Control Module(1MG-CPU)
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA		898844713300	8F4811FA	MG Control Module(2MG-CPU)
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA	Included in PCU	898844712400	92AD318F	MG Control Module(1MG-CPU) Field Fix 16-TF-92
2016	TOYOTA	PRIUS v	1.8	A/T	GTYXV01.8PCU	$07EA		898844713300	8F4811FA	MG Control Module(2MG-CPU)

1.02.00 Electronic control module, Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Type of control module	Module ID	Part number	CAL ID	CVN	Note
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U	ECM	$07E8	89661-76161	37616100	79BD7B02	Main
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U		$07E8		A4701000	611F6EF2	Sub
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U	Hybrid Control Module	$07EA	89681-76271	896B37623100	0A27540F	Main
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U		$07EA		896B57603000	900D42CC	Sub
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U	MG Control Module	$07EA	Included in PCU	898844708200	6DDD03A4	MG Control Module(1MG-CPU)
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U		$07EA		898844709200	DA6CB756	MG Control Module(2MG-CPU)
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U	MG Control Module	$07EA	Included in PCU	898844708300	1686932C	MG Control Module(1MG-CPU) Field Fix 17-TF-62
2017	TOYOTA	CT 200h	1.8	A/T	HTYXV01.8P3U		$07EA		898844709200	DA6CB756	MG Control Module(2MG-CPU)
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U	ECM	$07E8	89661-47800	34775000	34934400	Main
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U		$07E8		A4701000	611F6EF2	Sub
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U	Hybrid Control Module	$07EA	89981-47630	899834753000	66B0ED70	Main
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U		$07EA		899856201000	6D85C844	Sub
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U	Hybrid Control Module	$07EA	89981-47631	899834753100	TBD	Main Field Fix 17-TF-66
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U		$07EA		899856201000	6D85C844	Sub Field Fix 17-TF-66
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U	MG Control Module	$07EA	Included in PCU	898844712300	E61A6C89	MG Control Module(1MG-CPU)
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U		$07EA		898844713300	8F4811FA	MG Control Module(2MG-CPU)
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U	MG Control Module	$07EA	Included in PCU	898844712400	92AD318F	MG Control Module(1MG-CPU) Field Fix 17-TF-62
2017	TOYOTA	PRIUS v	1.8	A/T	HTYXV01.8P3U		$07EA		898844713300	8F4811FA	MG Control Module(2MG-CPU)

1.02.00 Electronic control module, Calibration ID (CID) and Calibration Verification Number (CVN)

Model Year	Manufacturer	Model	Engine Size	Transmission	Test Group	Type of control module	Module ID	Part number	CAL ID	CVN	Note
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U	ECM	$07E8	89661-47840	34779000	1570B428	Main
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U		$07E8		A4701000	611F6EF2	Sub
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U	Hybrid Control Module	$07EA	89981-47230	899834740000	352ABC32	Main
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U		$07EA		899856201000	6D85C844	Sub
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U	Hybrid Control Module	$07EA	89981-47231	899834740100	TBD	Main Field Fix 18-TF-59
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U		$07EA		899856201000	6D85C844	Sub Field Fix 18-TF-59
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U	MG Control Module	$07EA	Included in PCU	898844712300	E61A6C89	1MG-CPU
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U		$07EA		898844713300	8F4811FA	2MG-CPU
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U	MG Control Module	$07EA	Included in PCU	898844712400	92AD318F	1MG-CPU Field Fix 18-TF-51
2018	TOYOTA	PRIUS v	1.8	A/T	JTYXV01.8P3U		$07EA		898844713300	8F4811FA	2MG-CPU

◄ IMPORTANT UPDATE ►

The attached Dealer Letter has been updated. Refer to the details below.

DATE	TOPIC
7/28/2020	• The Warranty Reimbursement Procedure section has been updated. • The Parts Ordering Process section has been updated.
7/8/2020	• The Warranty Reimbursement Procedure section has been updated.

The most recent update in the attached Dealer Letter will be highlighted with a red box.

Please review this notification with your staff to assure that all relevant personnel have been briefed regarding this subject.

Thank you for your cooperation.

TOYOTA MOTOR NORTH AMERICA | Quality

Toyota Motor Sales, USA, Inc.
6565 Headquarters Drive
Plano, TX 75024
(469) 292-4000

Original Publication Date: June 24, 2020

To: All Toyota Dealer Principals, General Managers, Service Managers, and Parts Managers

SAFETY RECALL 20TA10 *(Remedy Notice)*

Certain 2013-2015 Model Year Prius
Certain 2014 - 2017 Model Year Prius V
Hybrid System Software Update
NHTSA Recall No. 20V-369

Model / Years	Production Period	Approximate Total Vehicles	Approximate Stop Sale Dealer Inventory
Prius / 2013 - 2015	Mid-March 2013 – Early November 2015	204,800	0
Prius V / 2014 -2017	Late June 2014 – Late November 2017	61,800	0

On June 24, 2020, Toyota filed a Defect Information Report (DIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall on certain 2013 to 2015 model year Prius and certain 2014 to 2017 Prius V vehicles.

Condition

The involved vehicles were designed to enter a failsafe driving mode in response to certain hybrid system faults. Toyota has found that in rare situations, the vehicle may not enter a failsafe driving mode as intended. If this occurs, the vehicle could lose power and stall. While power steering and braking would remain operational, a vehicle stall while driving at higher speeds could increase the risk of a crash.

Remedy

Any authorized Toyota dealer will update the software for the hybrid system performed ***FREE OF CHARGE***. For customer satisfaction, if the vehicle has experienced an inverter failure with certain hybrid system faults related to this condition, the inverter assembly will be repaired or replaced ***FREE OF CHARGE***.

Covered Vehicles

There are approximately 266,600 vehicles covered by this Safety Recall. Approximately 120 vehicles were distributed to Puerto Rico.

Owner Letter Mailing Date

Toyota will notify owners by late August 2020. A sample of the owner notification letter has been included for your reference.

Toyota makes significant effort to obtain current customer name and address information from each state through industry resources when mailing owner letters. In the event your dealership receives a notice for a vehicle that was sold prior to the Safety Recall announcement, it is the dealership's responsibility to forward the owner letter to the customer who purchased the vehicle.

Please note that only owners of the covered vehicles will be notified. If you are contacted by an owner who has not yet received a notification, please ***verify eligibility by confirming through TIS prior to performing repairs***. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

Dealer Inventory Procedures

New Vehicles in Dealership Inventory - Reminder

Toyota has not identified any new vehicles in dealership inventory that are covered by this Safety Recall. However, below is a reminder of the dealer's obligations pertaining to Safety Recalls if there are new vehicles in dealership inventory:

> Under Title 49, Section 30112 of the United States Code, a dealer cannot sell, offer for sale, or introduce or deliver for introduction in interstate commerce a new motor vehicle when it is aware that the vehicle does not comply with an applicable Federal Motor Vehicle Safety Standard or contains a defect related to motor vehicle safety. Further, 49 Code of Federal Regulations §577.13 requires us to provide the following advisory: It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Vehicle Safety Recall completion should always be verified through TIS. We request your assistance to ensure involved vehicles are identified and not delivered prior to performing the remedy.

NOTE: Dealers can identify if any of their new and used inventory has any open campaigns in the Vehicle Inventory Summary available in Dealer Daily (**Non SET and GST dealers:** https://dealerdaily.toyota.com/). The Vehicle Inventory Summary may take up to 4 hours to populate information for newly launched campaigns.

Pre-Owned Vehicles in Dealer Inventory

To ensure customer satisfaction, Toyota requests that dealers complete this Safety Recall on any used vehicles currently in dealer inventory that are covered by this Safety Recall prior to customer delivery. However, if the campaign cannot be completed (for example, due to remedy parts availability), delivery of a covered vehicle is acceptable if disclosed to the customer that the vehicle is involved in a Safety Recall.

Toyota expects dealers to use the attached Customer Contact and Vehicle Disclosure Form to obtain vehicle buyer information. Dealers are expected to provide a copy of the completed form, along with the most current

FAQ, to the vehicle buyer. Toyota and the dealer may use this information to contact the customer when the remedy becomes available.

Keep the completed form on file at the dealership and send a copy to quality_compliance@toyota.com. In the subject line of the email state "Disclosure Form 20TA10/20TB10" and include the VIN.

NOTE: Dealers can identify if any of their new and used inventory has any open campaigns in the Vehicle Inventory Summary available in Dealer Daily (**Non SET and GST dealers:** https://dealerdaily.toyota.com/). The Vehicle Inventory Summary may take up to 4 hours to populate information for newly launched campaigns.

Toyota Certified Used Vehicle (TCUV)

The TCUV policy prohibits the certification of any vehicle with an outstanding Safety Recall, Special Service Campaign, or Limited Service Campaign. Thus, no affected units are to be designated, sold, or delivered as a TCUV until all applicable Safety Recalls, Special Service Campaigns, and Limited Service Campaigns have been completed on that vehicle.

Toyota Rent-A-Car (TRAC) & Service Loaners

Toyota requests that dealers remove all TRAC and Service Loaner vehicles from service that are covered by a Safety Recall unless the defect has been remedied.

Customer Handling, Parts Ordering, and Remedy Procedures

Customer Contacts

Customers who receive the owner letter may contact your dealership with questions regarding the letter and/or the Safety Recall. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371) - Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

Salvage Title Vehicles

Every attempt should be made to complete an open Safety Recall when circumstances permit, unless noted otherwise in the Safety Recall dealer letter.

For complete details on this policy, refer to Toyota Warranty Policy 4.17, "What Is Not Covered by The Toyota New Vehicle Limited Warranty".

Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Tania Saldana (859) 815-9968 in Toyota Corporate Communications. Please do not provide this number to customers. Please provide this contact only to media.

Parts Ordering Process - ***Non SET and GST Parts Ordering Process***

It is possible that parts for this campaign are either required to be ordered in Campaign Part Order Request (CPOR) on Service Lane, or have been placed on Manual Allocation Control (MAC) due to potential limited part availability. Please check the CPOR/MAC report on Dealer Daily for the most up-to-date parts ordering information.

All Safety Recall, Service Campaign (SSC/LSC) parts are eligible for the Monthly Parts Return Program. Please refer to PANT Bulletin 2011-087 for campaign parts that are currently returnable under the Monthly Parts Return Program and for additional details.

The required Authorized Modification Label to indicate the new software calibration ID can be ordered through the Material Distribution Center (MDC).

Part Number	Description	Quantity
00451-00001-LBL	Authorized Modification Label	25 Per Pack

NOTE: Parts required for repair vary by model year and repair. Refer to the Technical Instructions for diagnostic procedure.

Inverter component or assembly replacement ***MAY BE*** necessary based on the vehicle condition and diagnosis as per the technical instructions. ***ONLY ORDER*** the necessary parts based on the vehicle's diagnosed condition. These parts can be found in the technical instructions.

The Power Management ECU is only needed if there is a reprogramming failure.

Model	Part Number	Description	Quantity As Needed
Prius	89681-47253*	Power Management ECU	1
Prius V	89681-47423*	Power Management ECU	1
Prius V	89681-47031*	Power Management ECU	1
Prius V	89981-47631*	Power Management ECU	1
Prius V	89981-47231*	Power Management ECU	1
Prius V	89681-47030**	Power Management ECU	1
Prius V	89981-47630**	Power Management ECU	1

****Does NOT require software update.***

*****Requires software update.***

Technician Training Requirements

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to currently hold at least one of the following certification levels:

- **Expert Technician (Hybrid)**
- **Master Technician**
- **Master Diagnostic Technician**

Always check which technicians can perform the repair by logging on to https://www.uotdealerreports.com. It is the dealership's responsibility to select technicians with the above certification level or greater to perform this repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

Remedy Procedures

Refer to TIS for Technical Instructions on repair. Conduct all non-completed Safety Recalls and Service Campaigns on the vehicle during the time of appointment.

Repair Quality Confirmation

The repair quality of covered vehicles is extremely important to Toyota. To help ensure that all vehicles have the repair performed correctly, please designate at least one associate (someone other than the individual who performed the repair) to verify the repair quality of every vehicle prior to customer delivery.

Parts Recovery Procedures

All parts replaced as part of this Safety Recall must be turned over to the parts department until appropriate disposition is determined. The parts department must retain these parts until notification via the Parts Recovery System (PRS) is received indicating whether to ship or scrap the parts. These parts are utilized by various departments for defect analysis, quality control analysis, product evaluation, as well as other purposes.

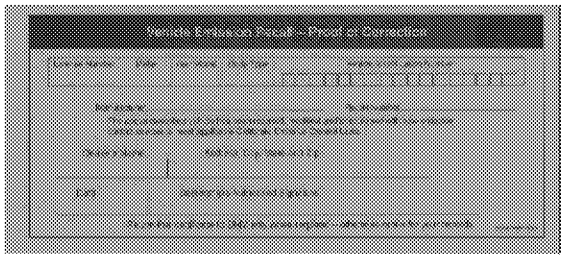
To help minimize dealer storage challenges, Toyota recommends that dealers:

- File the campaign claim accurately and promptly. The time a dealer is required to hold parts is based on when the campaign claim is paid by Toyota.
- Monitor the Warranty Parts Recovery Notifications and Part Scrap Report regularly.

Refer to Warranty Policies 9.3 and 9.6 for additional details.

Vehicles Emission Recall Proof of Correction Form (California only)

As this Safety Recall includes emission related parts, California dealers are requested to fill out the Vehicle Emissions Recall – Proof of Correction form after repairs have been completed. The vehicle owner may require this form for vehicle registration renewal. ***It is important to note that the forms are an official state document and blank forms must be secured to prevent misuse.*** Booklets can be ordered from the MDC (material number 00410-92007).



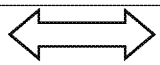
Please complete the form and provide it to the owner. The first non-completed VINs will be submitted to the California state DMV by early March 2021. If the vehicle owner's warranty claim will not be processed and paid prior to this date, please be sure to complete a form and provide it to a California owner.

Warranty Reimbursement Procedures

Loaner Vehicle or Alternative Transportation Reimbursement Procedure

There are no warnings that this condition exists. ***However, if the vehicle enters a fail-safe driving mode the following warning lights will be illuminated on the instrument panel when the vehicle enters the fail-safe driving mode.***

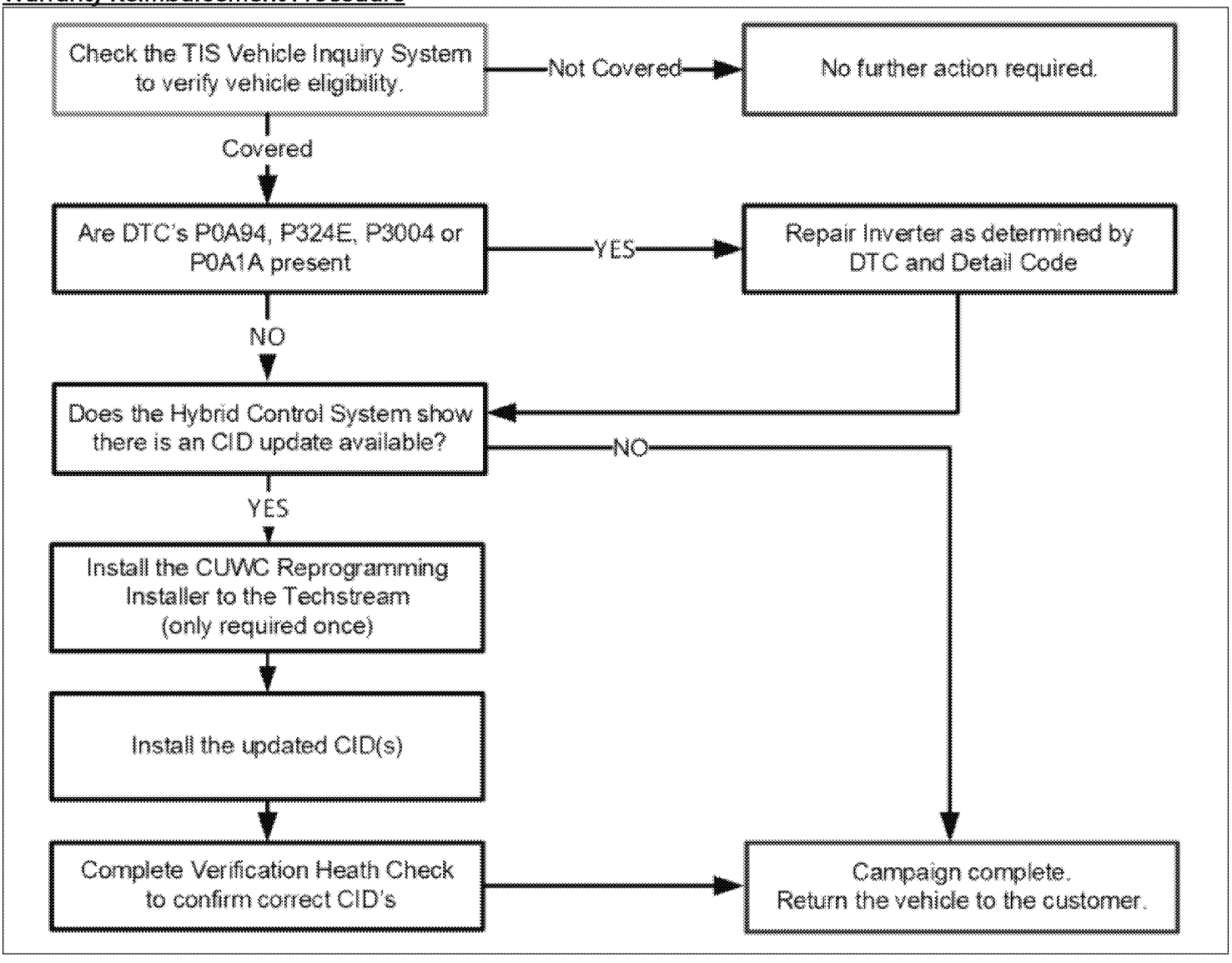
Warning Lights Prius V Without Multi-Information Display (MID)	
	Hybrid system warning
	Slip Indicator
	Check Engine Warning Light
 (Yellow Light)	Electronically Controlled Brake System Warning Light

Warning Lights Prius V With Multi-Information Display (MID) and Prius	
	Master Warning Light
	Hybrid system warning message
	PCS system warning message (if equipped)
NOTE: If PCS equipped. 	  Display switches
	Slip Indicator
	Check Engine Warning Light
 (Yellow Light)	Electronically Controlled Brake System Warning Light

Until the remedy is performed, drivers should avoid placing a high load on the hybrid system by avoiding full throttle application when possible. As indicated in your Owner's Manual, Toyota does not recommend towing with your vehicle, and we urge you to follow this recommendation to avoid placing a high load on the system.

If a customer is experiencing the condition described and is unable to drive it to the dealership, your dealership should arrange for vehicle pickup.

Warranty Reimbursement Procedure



NOTE

- **Warranty Op Codes have 2 separate tables below. First table is for Prius only. Second table is for Prius V only.**

Prius Vehicles ONLY

Description	
1.	Reprogram the Power Management ECU
2.	Replace the Power Management ECU **due to reprogramming failure (*NO* update to NEW ECU needed)**
3.	Replace the Power Management ECU **due to reprogramming failure (*UPDATE* to NEW ECU needed)**
4.	Replace the IPM (Intelligent Power Module)
5.	Replace the MG ECU
6.	Replace the inverter current sensor sub-assembly
7.	Replace the inverter assembly

Op Codes	Description (Reference Chart Above)							Flat Rate Time
	1	2	3	4	5	6	7	
A10001	✓							0.7
A10002		✓						1.3
A10003			✓					1.9
A10004	✓			✓				3.6
A10005	✓			✓	✓			3.6
A10006	✓			✓	✓	✓		3.7
A10007	✓						✓	2.7
A10008		✓		✓				4.2
A10009		✓		✓	✓			4.2
A10010		✓		✓	✓	✓		4.3
A10011		✓					✓	3.3
A10012			✓	✓				4.8
A10013			✓	✓	✓			4.8
A10014			✓	✓	✓	✓		4.9
A10015			✓				✓	3.9

- The flat rate times include 0.1 hours for administrative cost per unit for the dealership.
- A loaner vehicle or alternative transportation through the Toyota Rent-A-Car (TRAC) can be claimed, while the remedy is performed, for up to a maximum of **1** days as a sublet type "RT" under op codes: A10008, A1009, A1010, A1012, A1013, and A1014.
  - ***Rentals greater than 1 days or $35.00 per day requires DSPM authorization as per the Toyota Transportation Assistance Policy (TTAP).***
  - **Rental invoice *MUST* be attached to all rental claims. These claims may be subject to debit if rental invoice is not attached.**
- A loaner vehicle or alternative transportation through the Toyota Rent-A-Car (TRAC) can be claimed, due to back order of parts, for up to a maximum of **5** days as a sublet type "RT" under op codes: A10002, A10003, A10004, A10005, A10006, A10007, A10008, A10009, A10010, A10011, A10012, A10013, A10014, and A10015.
  - ***Rentals greater than 5 days or $35.00 per day requires DSPM authorization as per the Toyota Transportation Assistance Policy (TTAP).***
  - **Rental invoice *MUST* be attached to all rental claims. These claims may be subject to debit if rental invoice is not attached.**
- The cost of super long-life coolant will be reimbursed under sublet type "OF" for opcodes A10004, A10005, A10006, A10007, A10008, A10009, A10010, A10011, A10012, A10013, A10014, and A10015 up to 1.2 liters per vehicle for a MAX of $15.
- Towing can be claimed under ***ALL*** remedy op codes for a maximum of $250 as sublet type "TW" in the event the customer requests vehicle pickup.
  - **Towing invoice *MUST* be attached to all towing claims. These claims may be subject to debit if towing invoice is not attached.**

Prius V Vehicles ONLY

Description	
1.	Reprogram the Power Management ECU
2.	Replace the Power Management ECU **due to reprogramming failure (*NO* update to NEW ECU needed)**
3.	Replace the Power Management ECU **due to reprogramming failure (*UPDATE* to NEW ECU needed)**
4.	Replace the IPM (Intelligent Power Module)
5.	Replace the MG ECU
6.	Replace the inverter current sensor sub-assembly
7.	Replace the inverter assembly

Op Codes	Description (Reference Chart Above)							Flat Rate Time
	1	2	3	4	5	6	7	
A10101	✓							0.7
A10102		✓						1.3
A10103			✓					1.9
A10104	✓			✓				3.6
A10105	✓			✓	✓			3.6
A10106	✓			✓	✓	✓		3.9
A10107	✓						✓	2.3
A10108		✓		✓				4.2
A10109		✓		✓	✓			4.2
A10110		✓		✓	✓	✓		4.5
A10111		✓					✓	2.9
A10112			✓	✓				4.8
A10113			✓	✓	✓			4.8
A10114			✓	✓	✓	✓		5.1
A10115			✓				✓	3.5

- The flat rate times include 0.1 hours for administrative cost per unit for the dealership.
- A loaner vehicle or alternative transportation through the Toyota Rent-A-Car (TRAC) can be claimed, while the remedy is performed, for up to a maximum of **1** days as a sublet type "RT" under op codes: A10106, A10108, A10109, A10110, A10112, A10113 and A10114.
  - *Rentals greater than 1 days or $35.00 per day requires DSPM authorization as per the Toyota Transportation Assistance Policy (TTAP).*
  - **Rental invoice *MUST* be attached to all rental claims. These claims may be subject to debit if rental invoice is not attached.**
- A loaner vehicle or alternative transportation through the Toyota Rent-A-Car (TRAC) can be claimed, due to back order of parts, for up to a maximum of **5** days as a sublet type "RT" under op codes: A10102, A10103, A10104, A10105, A10106, A10107, A10108, A10109, A10110, A10111, A10112, A10113, A10114 and A10015.
  - *Rentals greater than 5 days or $35.00 per day requires DSPM authorization as per the Toyota Transportation Assistance Policy (TTAP).*
  - **Rental invoice *MUST* be attached to all rental claims. These claims may be subject to debit if rental invoice is not attached.**
- The cost of super long-life coolant will be reimbursed under sublet type "OF" for opcodes A10104, A10105, A10106, A10107, A10108, A10109, A10110, A10111, A10112, A10113, A10114, and A10015 up to 1.2 liters per vehicle for a MAX of $15.
- Towing can be claimed under ***ALL*** remedy op codes for a maximum of $250 as sublet type "TW" in the event the customer requests vehicle pickup.
  - **Towing invoice *MUST* be attached to all towing claims. These claims may be subject to debit if towing invoice is not attached.**

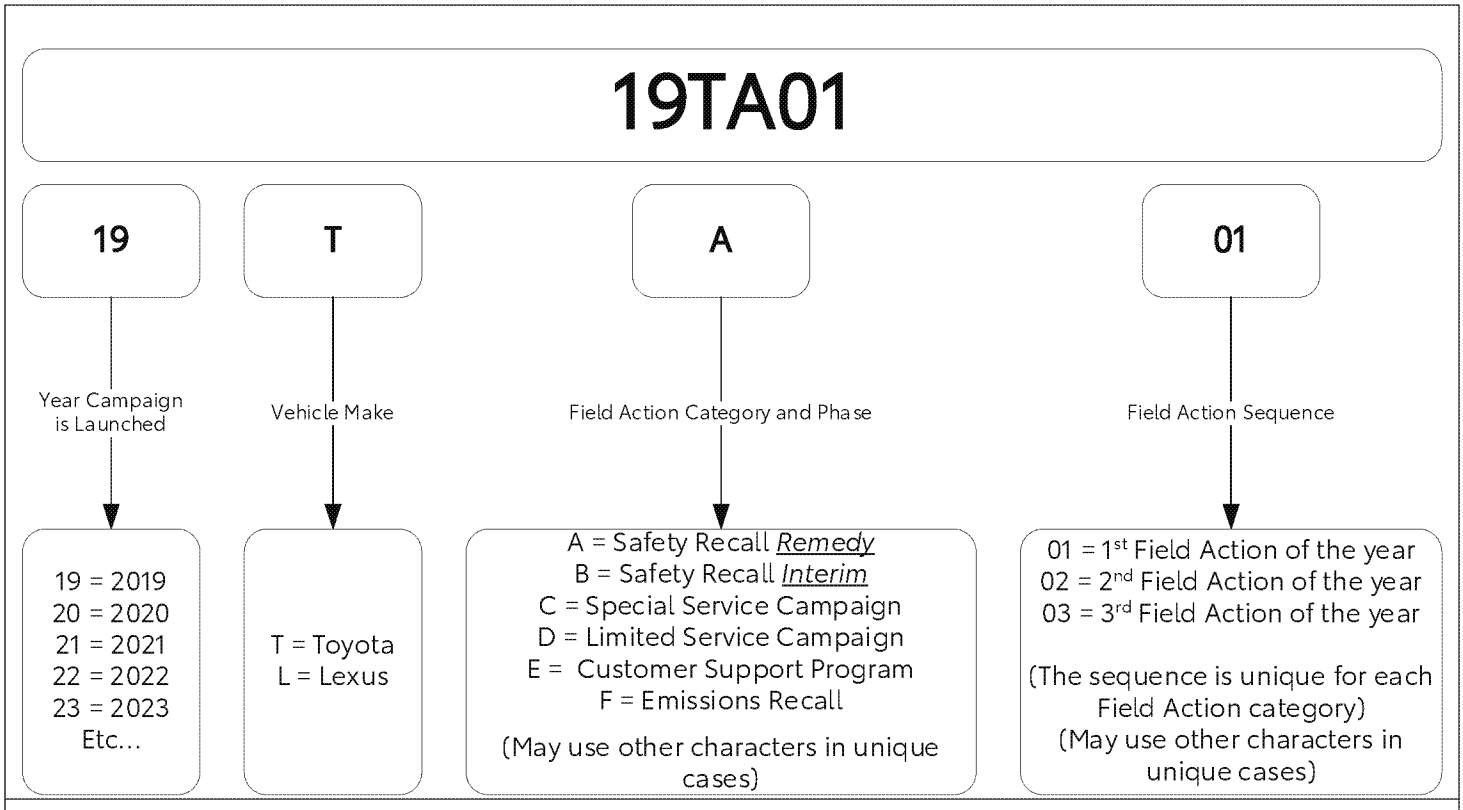
Claim Filing Accuracy and Correction Requests

It is the dealer's responsibility to file claims correctly for this Safety Recall. This claim filing information is used by Toyota for various government reporting activities; therefore, claim filing accuracy is crucial. If it has been identified that a claim has been filed using an incorrect Op Code or a claim has been filed for an incorrect VIN, refer to Warranty Procedure Bulletin PRO17-03 to correct the claim.

Customer Reimbursement

Reimbursement consideration instructions will be included in the owner letter.

Campaign Designation / Phase Decoder



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019

20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020

21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021

Please review this entire package with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Safety Recall.

Thank you for your cooperation.
TOYOTA MOTOR SALES, U.S.A., INC.

TOYOTA

SAFETY RECALL 20TA10 *(Remedy Notice)*

Certain 2013-2015 Model Year Prius
Certain 2014 - 2017 Model Year Prius V
Hybrid System Software Update
NHTSA Recall No. 20V-369

Frequently Asked Questions
Original Publication Date: June 24, 2020

Q1: What is the condition?

A1: The involved vehicles were designed to enter a failsafe driving mode in response to certain hybrid system faults. Toyota has found that in rare situations, the vehicle may not enter a failsafe driving mode as intended. If this occurs, the vehicle could lose power and stall. While power steering and braking would remain operational, a vehicle stall while driving at higher speeds could increase the risk of a crash.

Q2: What is Toyota going to do?

A2: Toyota will send an owner notification by first class mail by late August 2020, advising owners to make an appointment with their authorized Toyota dealer to have a software update for the hybrid system performed ***FREE OF CHARGE***. For customer satisfaction, if the vehicle has experienced an inverter failure with certain hybrid system faults related to this condition, the inverter assembly will be repaired or replaced ***FREE OF CHARGE***.

NOTE (Customers who live in the state of California)

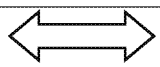
The state of California requires the completion of Safety Recalls / Service Campaigns on emission related parts prior to vehicle registration renewal. In addition, the State requires that every vehicle must pass an emission test (SMOG Check) every two years and before it is sold. Without the completion of this ***FREE*** Safety Recall, the California Air Resources Board (CARB) will not allow your vehicle to be registered. State of California Regulations require Toyota to provide the Department of Motor Vehicles with a record of all vehicles that have not had the Safety Recall completed.

Your Toyota dealer will provide you with a Vehicle Emissions Recall Proof of Correction Form after the campaign has been completed. Please ensure you retain this form, because the DMV may require that you supply proof that the campaign has been completed during your vehicle registration renewal process.

Q3: ***Are there any warnings that this condition exists?***

A3: No. There are no warnings that this condition exists. ***However, if the vehicle enters a fail-safe driving mode the following warning lights will be illuminated on the instrument panel when the vehicle enters the fail-safe driving mode.***

Warning Lights Prius V Without Multi-Information Display (MID)	
	Hybrid system warning
	Slip Indicator
	Check Engine Warning Light
 (Yellow Light)	Electronically Controlled Brake System Warning Light

Warning Lights Prius V With Multi-Information Display (MID) and Prius	
	Master Warning Light
	Hybrid system warning message
	PCS system warning message (if equipped)
NOTE: If PCS equipped. 	 Display switches
	Slip Indicator
	Check Engine Warning Light
 (Yellow Light)	Electronically Controlled Brake System Warning Light

Q4a: ***How long and what distance can a vehicle be driven when the vehicle enters a fail-safe driving mode?***

A4a: It differs in each model and with varying driving and environmental conditions. Generally, the failsafe mode is designed to allow the driver to operate the vehicle at reduced power for certain distances to allow the driver to maneuver the vehicle to a safe location.

Q4b: What should I do if my vehicle enters fail-safe driving mode?

A4b: If a vehicle enters a fail-safe driving mode, the driver should pull over and stop the car in a safe area at the earliest opportunity. The driver should then contact his/her local Toyota dealer for assistance.

Q4c: Can you describe what happens when the vehicle does not enter fail-safe driving mode as intended? Would the brakes still be operational?

A4c: The vehicle will run on inertia only. However, the brakes, power steering, and auxiliary systems such as turn signals will be operational as usual.

Q4: What steps can I take to reduce the possibility of this condition occurring until the remedy is performed?

A4: Until the remedy is performed, drivers should avoid placing a high load on the hybrid system by avoiding full throttle application when possible. As indicated in your owner's manual, Toyota does not recommend towing with your Prius or Prius V, and we urge you to follow this recommendation to avoid placing a high load on the hybrid system.

Q5: What if I experience the condition described above?

A5: If you experience the condition described above, please contact your local authorized Toyota dealer for diagnosis and repair.

Q6: Which and how many vehicles are covered by this Safety Recall?

A6: There are approximately 266,600 vehicles covered by this Safety Recall. Approximately 120 vehicles were distributed to Puerto Rico.

Model Name	Model Year	Production Period
Prius	2013 - 2015	Mid-March 2013 – Early November 2015
Prius V	2014 - 2017	Late June 2014 – Late November 2017

Q7: How long will the repair take?

A7: The software update will take approximately 45 minutes to complete. If the inverter needs to be repaired or replaced, the repair could take up to 5.5 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q8: What if I previously paid for repairs related to this Safety Recall?

A8: Reimbursement consideration instructions will be provided in the owner letter.

Q9: How does Toyota obtain my mailing information?

A9: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information, based upon the DMV records. Please make sure your registration or title information is correct.

Q10: What if I have additional questions or concerns?

A10: If you have additional questions or concerns, please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

TOYOTA

This notice applies to your vehicle:
[VIN]

URGENT SAFETY RECALL
This is an important Safety Recall. The remedy will be performed **FREE OF CHARGE** to you.

IMPORTANT SAFETY RECALL (*Remedy Notice*)

Certain 2013-2015 Model Year Prius
Certain 2014 - 2017 Model Year Prius V
Hybrid System Software Update
NHTSA Recall No. 20V-369

Dear (customer's First/Last name)

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Toyota has decided that a defect, which relates to motor vehicle safety, exists in certain 2013 to 2015 model year Prius and certain 2014 to 2017 Prius V vehicles.

You received this notice because our records, which are based primarily on state registration and title data, indicate that you are the current owner.

What is the condition?
The involved vehicles were designed to enter a failsafe driving mode in response to certain hybrid system faults. Toyota has found that in rare situations, the vehicle may not enter a failsafe driving mode as intended. If this occurs, the vehicle could lose power and stall. While power steering and braking would remain operational, **a vehicle stall while driving could increase the risk of a crash.**

What should you do?

Please contact any authorized Toyota dealer to schedule an appointment to have the remedy performed as soon as possible. ***Your local Toyota dealer will be more than happy to answer any of your questions.***

- ✓ To find a dealer near you, visit www.toyota.com/dealers.
- ✓ For more information on this and other Safety Recalls, including Frequently Asked Questions, visit www.toyota.com/recall. Input your full 17-digit Vehicle Identification Number (VIN) noted above to review information specific to your vehicle.
- ✓ If you require further assistance, you may contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 7:00 am to 7:00 pm, Saturday 7:00 am to 4:30 pm Central Time.

What will Toyota do?

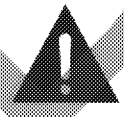
Any authorized Toyota dealer will perform the software update for the hybrid system ***FREE OF CHARGE.*** For customer satisfaction, if the vehicle has experienced an inverter failure with certain hybrid system faults related to this condition, the inverter assembly will be repaired or replaced ***FREE OF CHARGE.***

This is an important Safety Recall

The software update will take approximately 45 minutes to complete. If the inverter needs to be repaired or replaced, the repair could take up to 7.5 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

There are no warnings that this condition exists. ***However, if the vehicle enters a fail-safe driving mode the following warning lights will be illuminated on the instrument panel when the vehicle enters the fail-safe driving mode.***

Warning Lights Prius V Without Multi-Information Display (MID)	
	Hybrid system warning
	Slip Indicator
	Check Engine Warning Light
 (Yellow Light)	Electronically Controlled Brake System Warning Light

Warning Lights Prius V With Multi-Information Display (MID) and Prius	
	Master Warning Light
	Hybrid system warning message
	PCS system warning message (if equipped)
NOTE: If PCS equipped. 	  Display switches
	Slip Indicator
	Check Engine Warning Light
 (Yellow Light)	Electronically Controlled Brake System Warning Light

Until the remedy is performed, drivers should avoid placing a high load on the hybrid system by avoiding full throttle application when possible. As indicated in your Owner's Manual, Toyota does not recommend towing with your vehicle, and we urge you to follow this recommendation to avoid placing a high load on the system.

If your vehicle is experiencing the condition described and you are unable to drive it to the dealership, please contact your local authorized Toyota dealer who will arrange for vehicle pickup.

What if you live in California and do not have this Safety Recall Campaign performed?

The state of California requires the completion of Safety Recalls / Service Campaigns on emission related parts prior to vehicle registration renewal. In addition, the State requires that every vehicle must pass an emission test (SMOG Check) every two years and before it is sold. Without the completion of this ***FREE*** Safety Recall Campaign the California Air Resources Board (CARB) will not allow your vehicle to be registered. State of California Regulations require Toyota to provide the Department of Motor Vehicles with a record of all vehicles that have not had the Safety Recall Campaign completed.

Your Toyota dealer will provide you with a Vehicle Emissions Recall Proof of Correction Form after the campaign has been completed. Please ensure you retain this form, because the DMV may require that you supply proof that the campaign has been completed during your vehicle registration renewal process.

What if you have previously paid for repairs to your vehicle for this specific condition?

If you have previously paid for repair(s) to your vehicle for this specific condition prior to receiving this letter, you may be eligible for reimbursement. For reimbursement consideration, please submit a copy of your repair details (for example: a repair order), proof-of-payment, and ownership information to Toyota's online, self-service portal. Log in to your Toyota Owners account at https:/www.toyota.com/owners/, click on the "Resources" tab, select "Safety Recalls and Service Campaigns", and click on "Submit Reimbursement Request".

Alternatively, if you prefer to mail or fax this information for reimbursement consideration, please use the address or fax number shown below:

Toyota Customer Experience Center - TSR
Toyota Motor Sales, USA, Inc.
c/o Toyota Motor North America, Inc.
P O Box 259001 – SSC/CSP Reimbursements
Plano, Texas 75025-9001

FAX: 310-381-7756

Please refer to the attached Reimbursement Checklist for required documentation details.

What if you are not the owner or operator of this vehicle?

If you are a vehicle lessor, Federal Law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If you know the current owner or operator, please forward this letter to them.

If you would like to update your vehicle ownership or contact information, please visit https://www.toyota.com/recall/update-info-toyota. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information.

If you believe that the dealer or Toyota has failed or is unable to remedy the defect within a reasonable time or without charge, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, *1200 New Jersey Avenue S.E., Washington, D.C. 20590, or call the toll free Vehicle Safety Hot Line at* ***1-888-327-4236 (TTY: 1-800-424-9153)***, or go to http://www.safercar.gov.

We have sent this notice in the interest of your continued satisfaction with our products. We sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,

Toyota Motor Sales, USA

TOYOTA

Toyota Motor Sales, USA, Inc.
6565 Headquarters Drive
Plano, TX 75024
(469) 292-4000

CUSTOMER CONTACT & VEHICLE DISCLOSURE FORM

This form is not applicable for new vehicles in dealership inventory and TCUV units.

This vehicle is involved in a Safety Recall. At this time, remedy parts are not available, and the remedy has ***NOT*** been performed. I understand that the vehicle will need to be returned to an authorized Toyota dealer to have the remedy performed at ***NO CHARGE*** when the remedy is available.

Customer Signature _____

Toyota recommends that you register with the Toyota Owners Community at http://www.toyota.com/owners/ and regularly check recall applicability using www.toyota.com/recall or www.safercar.gov. You will need to input your 17-digit Vehicle Identification Number (VIN).

VIN | | | | | | | | | | | | | | | | | **Campaign Code** | | | |

Model _____ **Model Year** _____

Customer Information

Customer Name _____ **Customer Email** _____

Customer Address _____ **Home Phone #** _____

_____ **Mobile Phone #** _____

_____ **Date** _____

Please provide this information so that Toyota or your dealer can notify you when the remedy becomes available. This information will only be used for campaign communications. If you'd like to update your preferred contact information in the future, visit www.toyota.com/ownersupdate ***or contact us at 1-888-270-9371.***

Dealer Information

Dealer Name/Address _____ **Dealer Code** _____

_____ **Dealer Phone Number** _____

_____ **Dealer Staff Name** _____

_____ **Dealer Staff Signature** _____

TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL 20TA10

HYBRID SYSTEM SOFTWARE UPDATE

CERTAIN 2013 - 2015 PRIUS

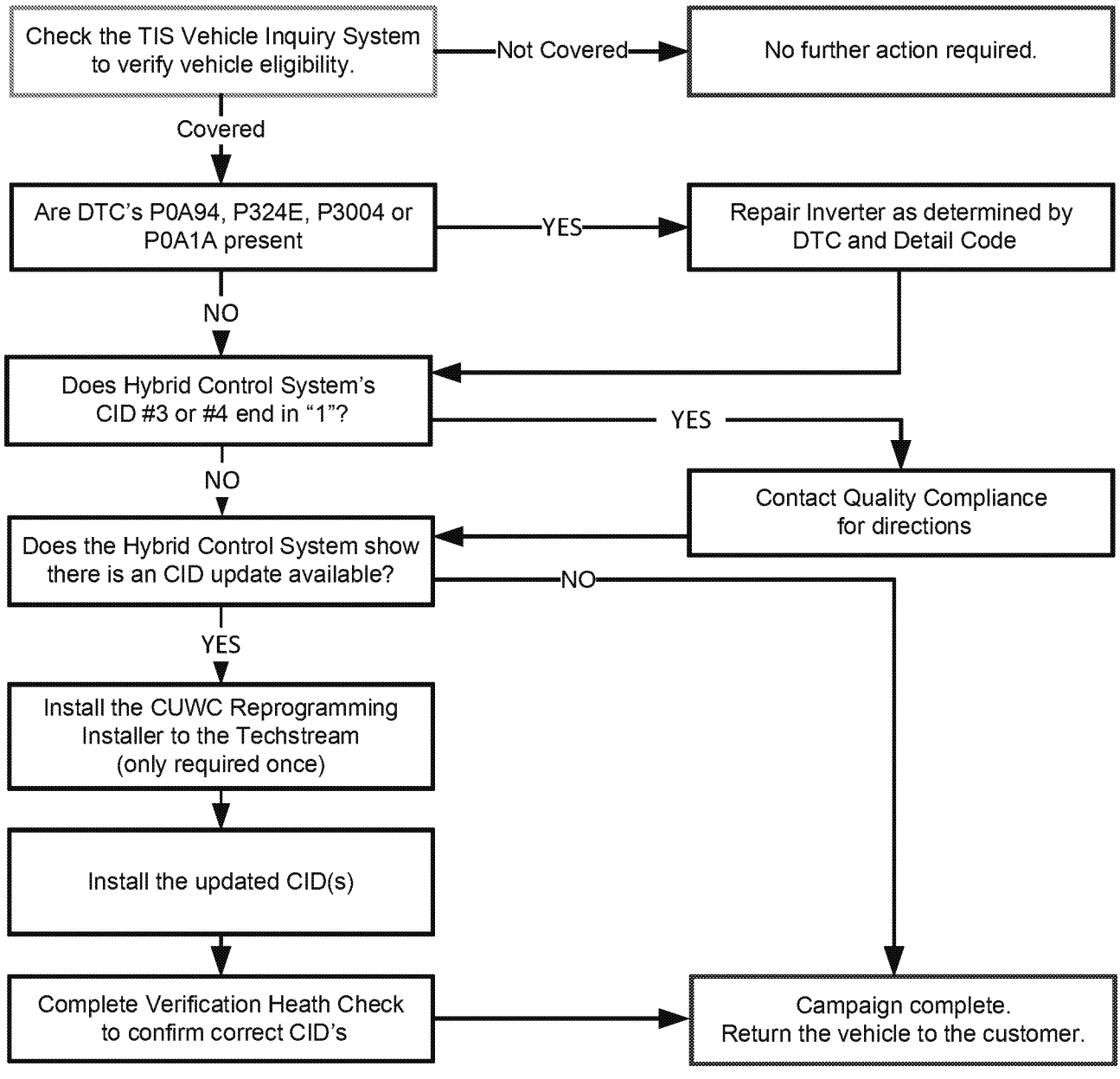
Prius V Technical Instructions are in a separate document

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold at least one of the following certification levels:

- Expert Technician (Hybrid)
- Master Technician
- Master Diagnostic Technician

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY
   a. Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
   b. Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

   Note: TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

III. PREPARATION

1. PARTS

Part Number	Part Description	Quantity
00451-00001-LBL*	Authorized Modification Label	1

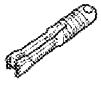
*Labels can be ordered in packs of 25 from the MDC through the Dealer Daily Website

2. TOOLS, SUPPLIES & EQUIPMENT

- Standard Hand Tools
- Techstream 2.0 / Techstream Lite with software version 13.30 or greater installed
- GR8 Battery Diagnostic Station
- T-SB-0134-16

SST – These Special Service Tools required for this repair:

Part Number	Tool Name	Quantity
09891-47020	Inverter Case Separator	1
Campaign tool	Joint Fuse removal tool	1

Joint Fuse Removal Tool


The fuse removal tools were shipped to the dealers for a previous campaign.

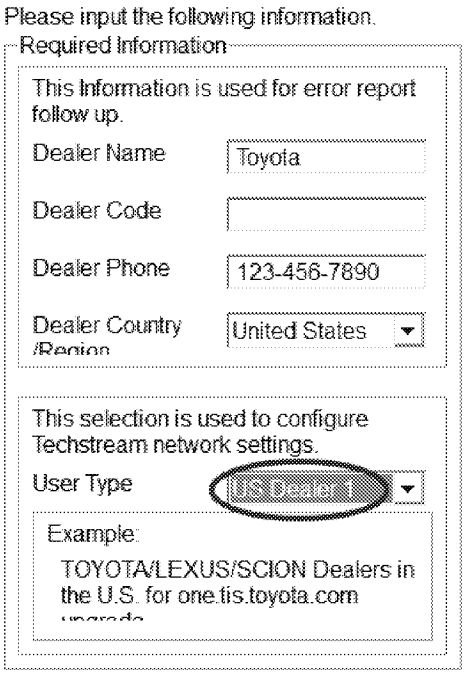
IV. BACKGROUND

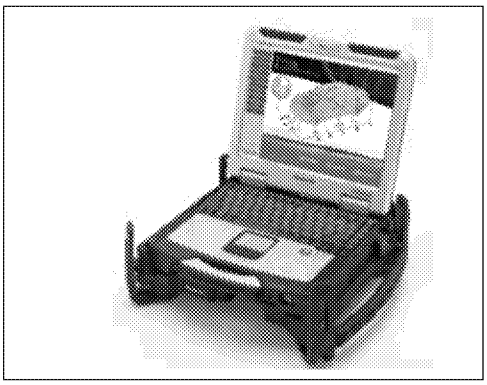
The involved vehicles were designed to enter a failsafe driving mode in response to certain hybrid system faults. Toyota has found that in rare situations, the vehicle may not enter a fail-safe driving mode as intended. If this occurs, the vehicle could lose power and stall. While power steering and braking would remain operational, a vehicle stall while driving at higher speeds could increase the risk of a crash.

V. INSPECT INVERTER CONDITION

1. Verify Techstream Configuration

a. From the menu at the top of the screen, select: Setup / Techstream Configuration.
b. Continue to the third setup screen: Required Information.
c. Verify that "US Dealer 1" is selected as the User Type.



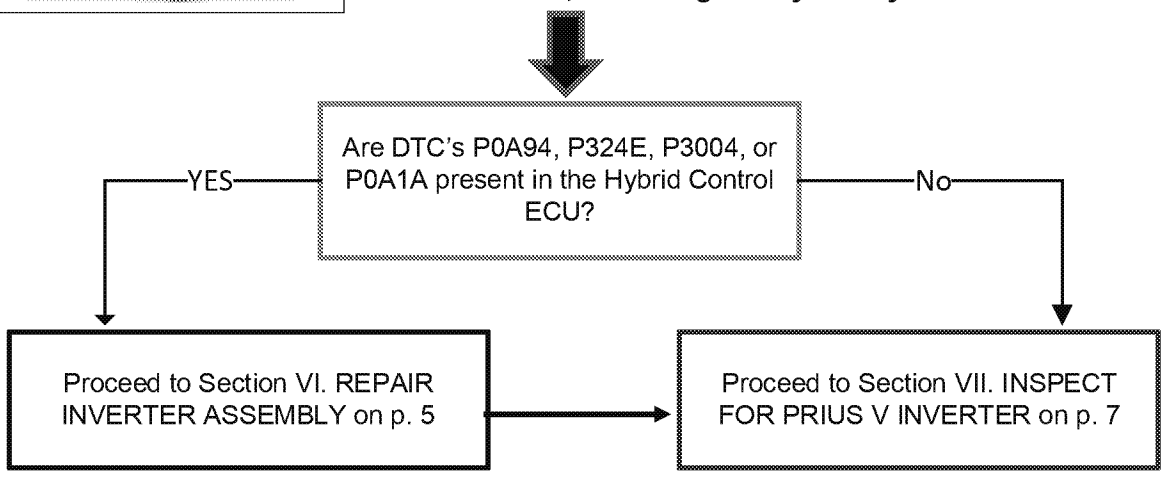


2. PERFORM HEALTH CHECK

a. Using a Techstream, perform a Health Check.

STOP	**If any hybrid DTC's are found that indicate a safety risk at performing this repair, do not proceed until they have been resolved.**

Note: This Safety Recall covers only the specified ECU updates and Inverter repairs, as detailed in these instructions. It does not cover the diagnosis or replacement of any other parts on the vehicle, including the hybrid system.



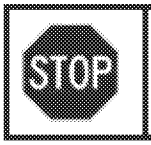
VI. REPAIR INVERTER ASSEMBLY

Note: Repairing the inverter is required only if DTC's P0A94, P324E, P3004 or P0A1A are present. If these DTC's are not present, skip to section VII. Inspect for Prius V Inverter on page 7.

1. DETERMINE REPAIR COMPONENTS BASED ON DTC DETAIL CODE

a. If multiple DTCs are present, save the freeze frame data.
b. After saving the freeze frame data, clear codes and confirm what DTCs reset.
c. If multiple codes return, follow the repair manual diagnosis procedure for the DTC with Freeze Frame Data Occurrence Order value of "1".
d. Use the correct table on the following pages to identify the parts required for repair, the correct parts are listed in the bottom row of each table.

DTC	DTC DETAIL CODE	• IPM	• MG-ECU	• MG-ECU • IPM	• MG-ECU • CURRENT SENSOR • IPM	• INVERTER ASSY
P0A94	127			X		
	172	X				
	442			X		
	547		X			
	548				X	
	549		X			
	550			X		
	553	X				
	554		X			
	555				X	
	556		X			
	557	X				
	564			X		
	585			X		
	587			X		
	589			X		
	590			X		
P324E	788				X	
P0A1A	151				X	
	155		X			
	156		X			
	166		X			
	200		X			
	658		X			
	659		X			
	791		X			
	792		X			
	793		X			
P3004	131					X
	132					X
	800	X				
	801	X				
PARTS & QUANTITY (QTY)		04899-47021 (1) 08887-02809 (2) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1)	G920H-47150 (1) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1)	04899-47021 (1) 08887-02809 (2) G920H-47150 (1) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1)	04899-47021 (1) 08887-02809 (2) G920H-47150 (1) G920J-52010 (1) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1)	ORDER INVERTER BY VIN



Thermal grease for IPM replacement is NOT interchangeable. Only grease specified for the Prius inverter can be used. Grease for the Highlander IPM replacement will result in inverter failure if used.

2. TO REPAIR THE INVERTER, CLICK ON THE RELEVANT LINK BELOW:

   2013 Prius: Intelligent Power Module Transistor Removal

   2014 Prius: Intelligent Power Module Transistor Removal

   2015 Prius: Intelligent Power Module Transistor Removal

3. ONCE THE INVERTER REPAIR IS COMPLETED, CONTINUE TO THE NEXT SECTION.

VII. INSPECT FOR PRIUS V INVERTER

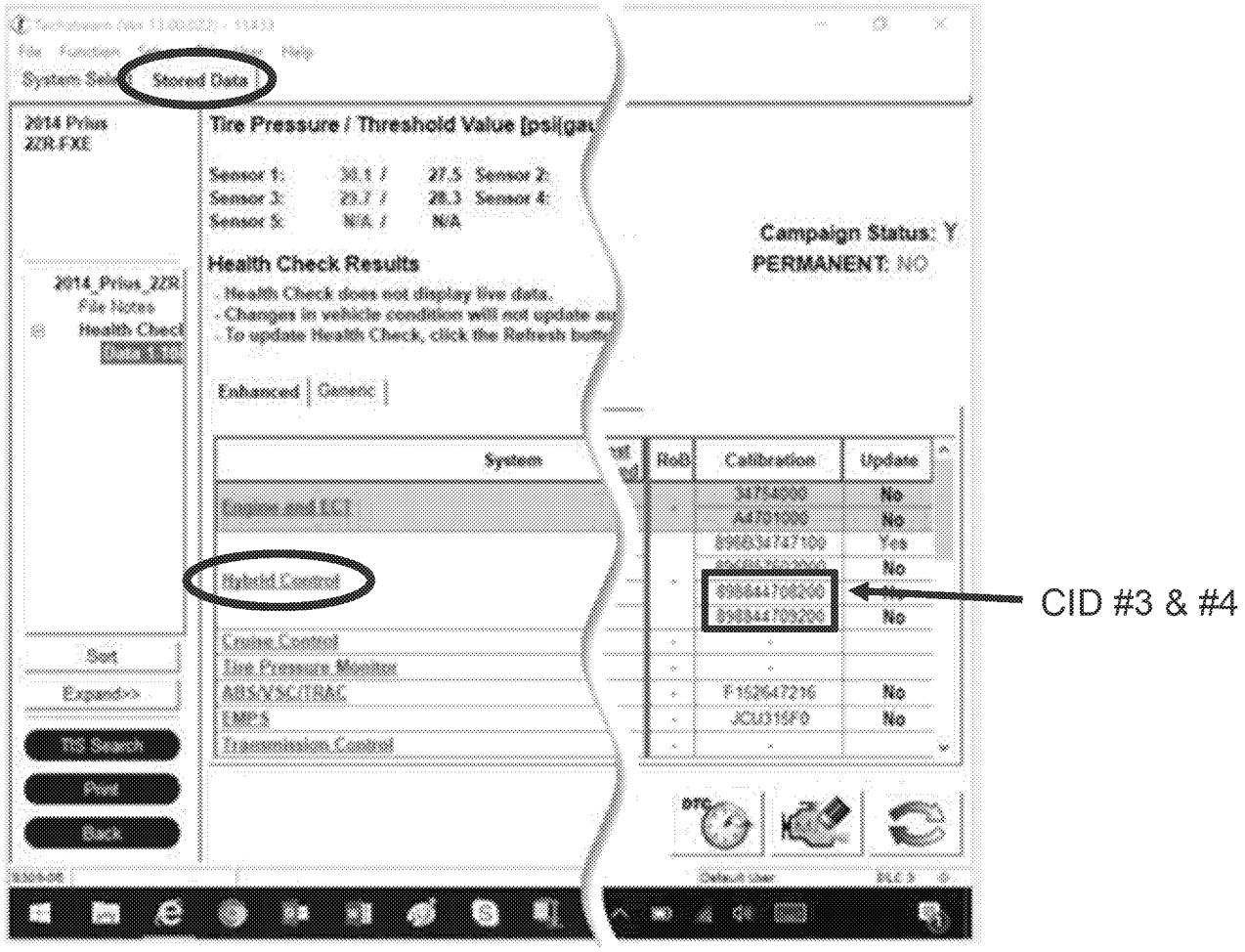
1. INSPECTION OF HYBRID CONTROL CID'S #3 & #4

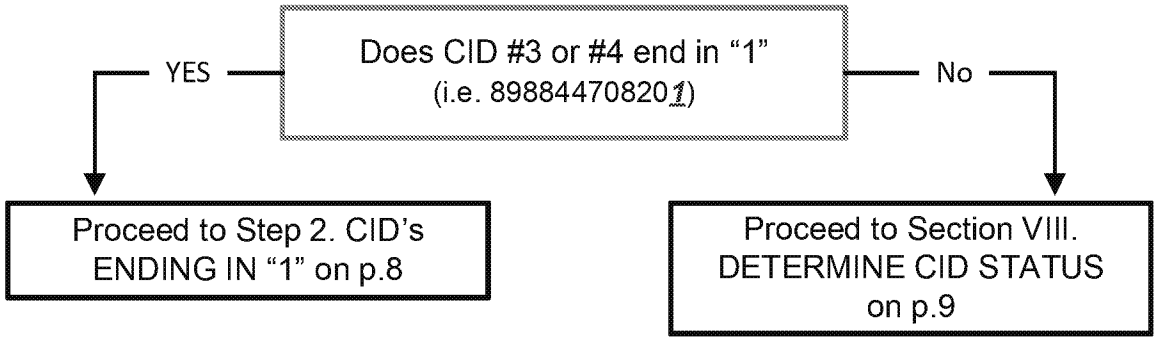
a. Identify the Hybrid Control CID #3 & #4 from the Stored Data tab.

b. Determine if the last digit of CID #3 & #4 is a "0" or a "1".

For example: CID 898844708200, has the last digit of "0".
CID 898844708201, has the last digit of "1".

Note: The actual CID's will vary, and may not be the same CID as the example.





2. CID's ENDING IN "1"

It may be necessary to determine if a Prius has been incorrectly repaired with a Prius V inverter or Motor Generator (MG) ECU in the past. This condition may be identified by reviewing the Hybrid Control System CIDs #3 & #4. If the #3 and #4 CIDs end in a "1" instead of a "0", this may indicate that Prius V components were installed in a Prius vehicle.

This mismatch of CID's will create an error message when performing 20TA10 and will prevent its completion. To address this situation, the vehicle must be repaired using parts that are correct for a Prius.

If the vehicle requires replacement of the Inverter or MG ECU because Prius V parts are installed, it will be necessary to contact Quality Compliance for direction.

Please check Toyota National Service History (NSH) to determine if the Prius V inverter or MG ECU was installed at a Toyota dealership. The following part numbers would confirm the issue:

- G9200-49056 Prius V Inverter Assembly
- G920H-47040 Prius V Motor Generator ECU

Email Quality Compliance with the following information to determine the repair direction:

Email address: quality_compliance@toyota.com
Email subject: 20TA10 Inverter/MG ECU Request
Email contents:

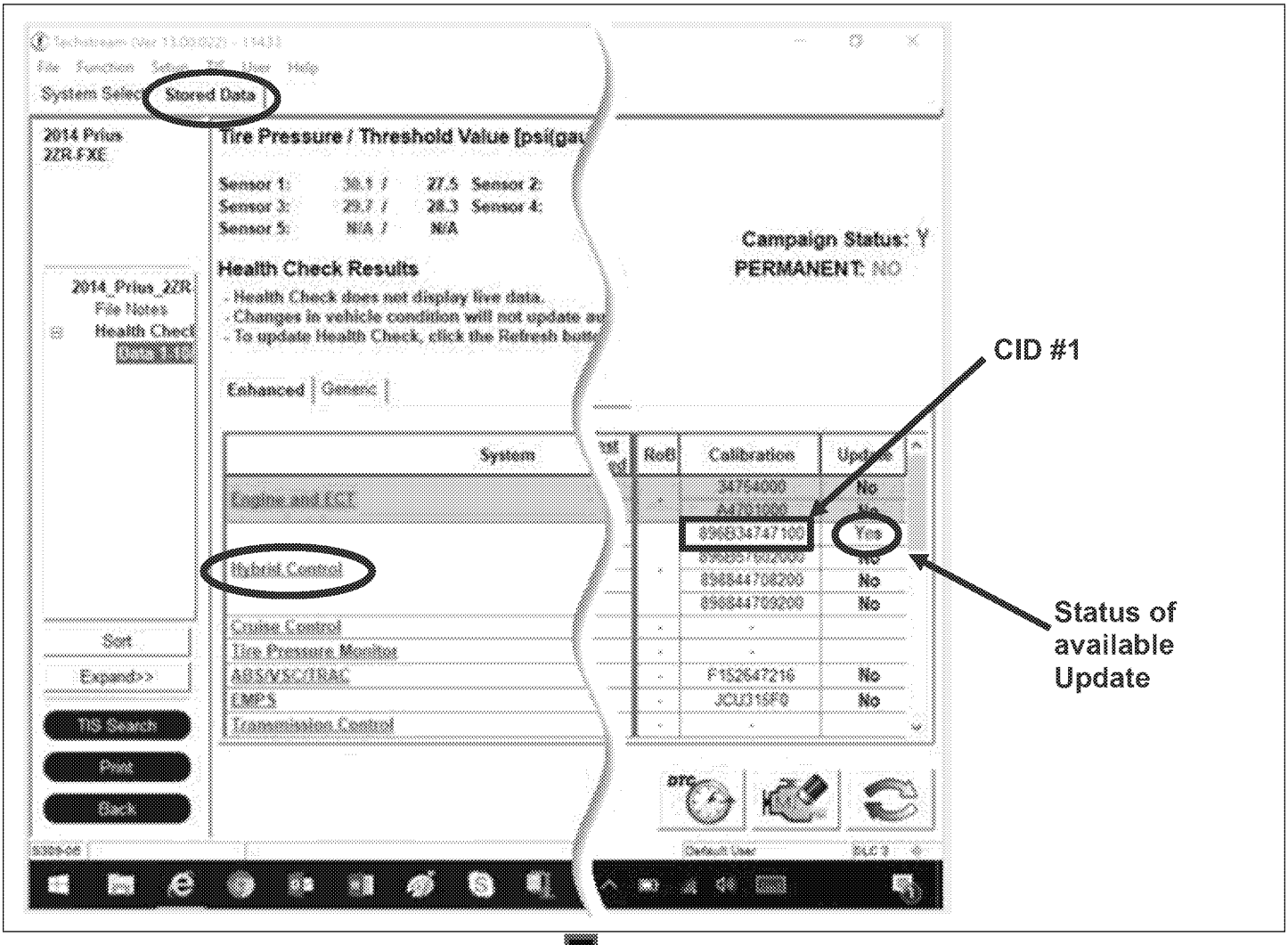
- VIN #
- Screenshot of Hybrid Control CID's
- RO# and date of previous Inverter or MG ECU replacement in NSH (if found).
- Part number of Inverter or MG ECU replacement in NSH (if found).
- Technicians Name and contact number.

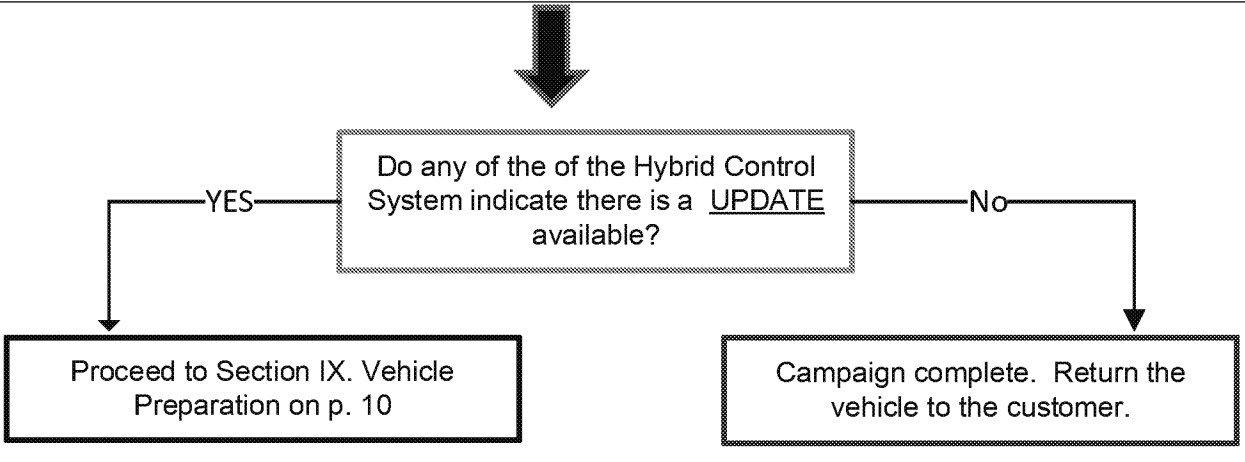
VIII. DETERMINE CID STATUS

1. DETERMINE STATUS of HYBRID CONTROL SYSTEM CID's

a. Locate the Update column for the Hybrid Control System in the Stored Data tab.

b. Determine the status of the **CID #1** for the Hybrid Control ECU; indicated by a **YES** or **NO** in the Update column.





If the Update Column listed "No" in the location specified above, no further action is necessary. The campaign is now completed. The vehicle can be returned to the customer.

IX. VEHICLE PREPARATION

The ECU reprograming procedure is detailed in T-SB-0134-16. Reference this Bulletin for additional detailed procedures and information.

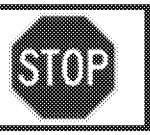
3. VEHICLE BASICS

a. Confirm the following conditions:
- Vehicle in the IG position (engine off).
- Transaxle in Park.
- Parking brake engaged.
- Turn off all electrical accessories (i.e. Headlights, wipers, climate control, audio system, etc.)

4. CONNECT THE 12v BATTERY TO A POWER SUPPLY

a. Connect the DCA-800, GR8 or other type of a power supply (not a battery charger) to the 12v battery.

b. Activate the Power Supply Mode.

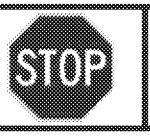


A power supply *MUST* be used during reprogramming. ECU damage will occur if the battery voltage is not properly maintained during this re-flash procedure.

Note: A power supply must be connected directly to the 12v battery terminals and NOT the remote jump posts under the hood (if equipped).

5. VERIFY TECHSTREAM SETUP

a. Verify that the Techstream meets the following conditions:
- Current version of software is installed (reference TIS for latest software version).
- The Techstream battery is fully charged. If not, connect the Techstream to a 120v source.
- The DLCIII cable is in good condition.



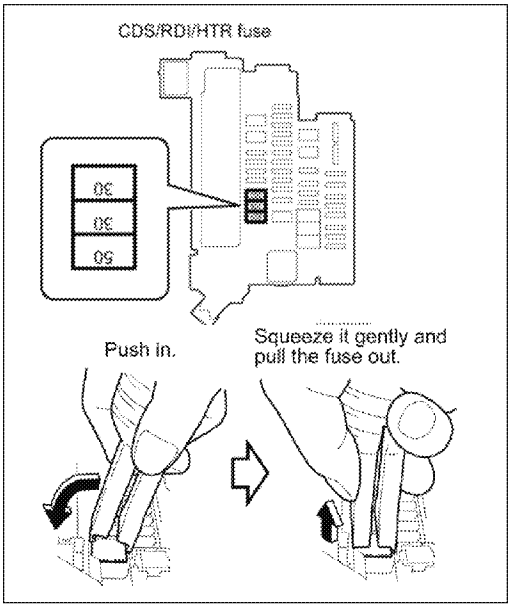
The Techstream battery must be maintained during the update procedure. If necessary, plug the Techstream into a 120v outlet to ensure that a failure does not occur.

Note: If the Techstream communication with the vehicle fails during the re-flash procedure, the ECU will be damaged and must be replaced.

6. MAINTAIN BRAKE SYSTEM PRESSURE

a. Depress the brake pedal fully 2 times within 2 seconds.

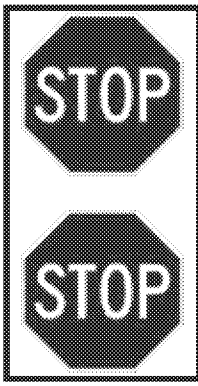
Note: You may hear the hydro-boost pump run for a few seconds when completing these steps. This procedure will prevent the pump from running during the calibration update procedure.



7. REMOVE JOINT FUSE FROM ENGINE ROOM FUSE BOX

a. Confirm the joint fuse orientation before removal because the fuse can be installed in either direction.

b. Using the fuse puller remove the joint fuse that encases the CDS (30A), RDI (30A) and HTR (50A).



Permanent damage to the ECU's can happen if these fuses are not removed.

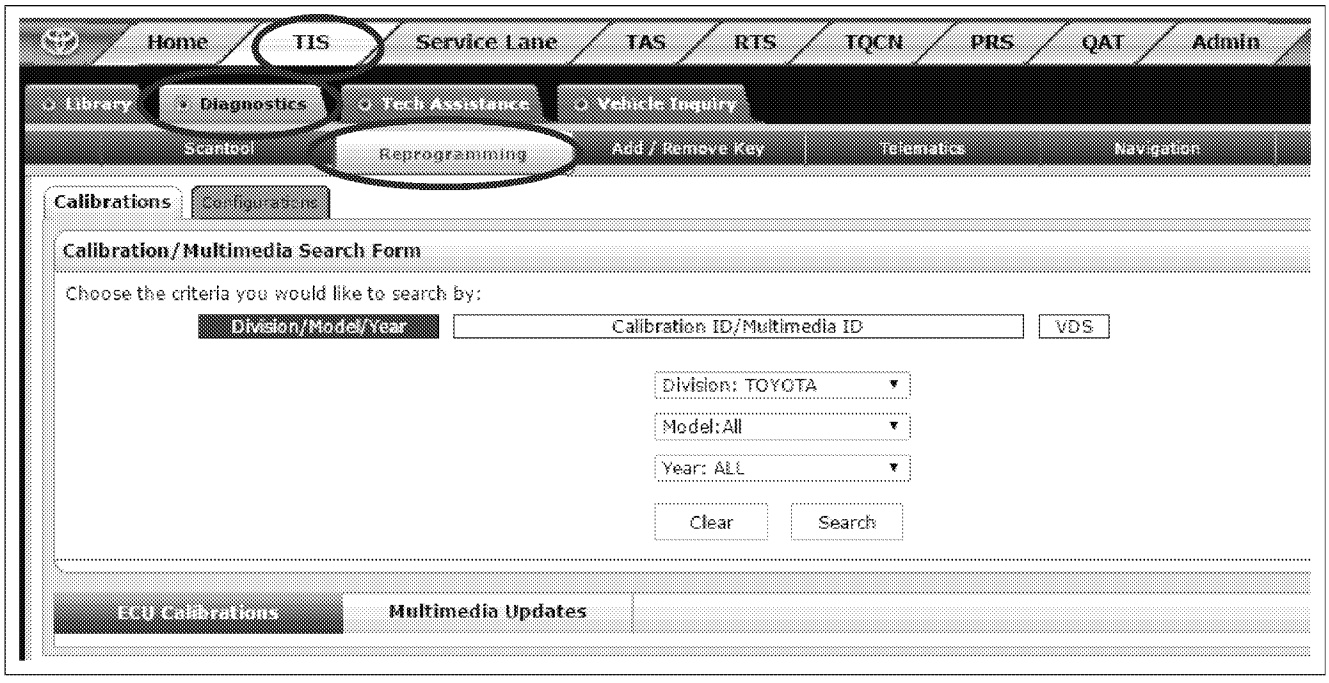
Removing these fuses will stop the vehicle from performing onboard diagnostic tests during the update, which could cause the update to fail and damage the ECU.

X. CUWC APPLICATION

1. INSTALL CUWC FILE INSTALLER (Only required once for each Techstream)

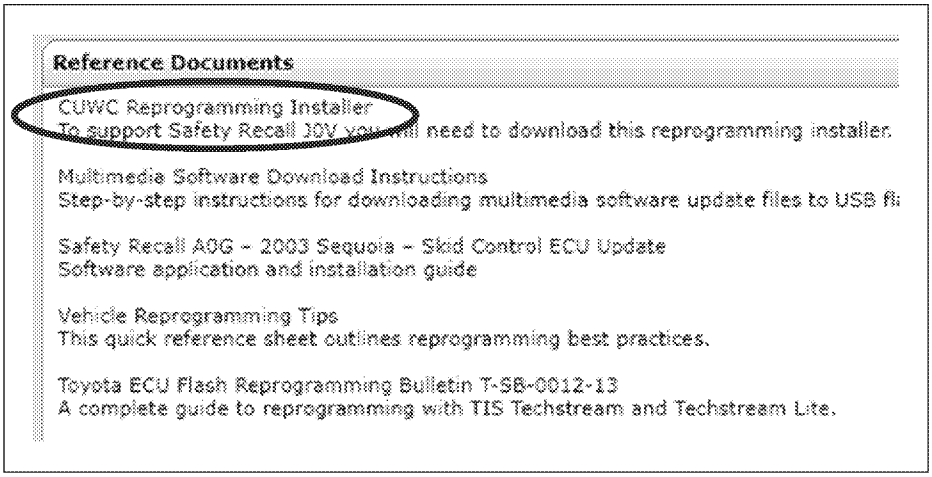
a. In TIS, select the following:

- TIS / Diagnostics / Reprograming



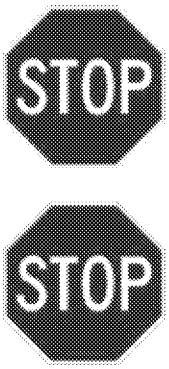
b. On the right side of the screen, select the following from the Reference Documents:

- CUWC Reprogramming Installer
- Follow the on-screen instructions to complete the installation.



Note: The installation of the CUWC Reprograming Installer will only need to be completed one time for each Techstream.

(cont. on next page)



Permanent damage to the ECU's will occur if the following actions are attempted during the CID update procedure:

- Attempt to close the CUWC installer
- Attempt to close the Calibration Wizard
- Turning off the vehicle's ignition
- Turning off the Techstream Unit
- Unplugging the Techstream from the vehicle while programing in in process

The following message will appear when the CUWC installation application is running. This image cannot be closed manually. **When the installation of all necessary CID's is complete, the image will close**.

Message displayed during CID update process:

CUWC is starting...
Lancement de CUWC...
CUWC esta iniciando...

<Caution>
- Do not operate Techstream
- When the CUWC application or PC Stop unexpectedly, please recover ECU from CUW application.

<Attention>
- Ne pas utiliser Techstream.
- Lorsque l' application CUWC ou le PC s' arrete inopinement, veuillez restaurer l' ECU depuis l' application CUWC.

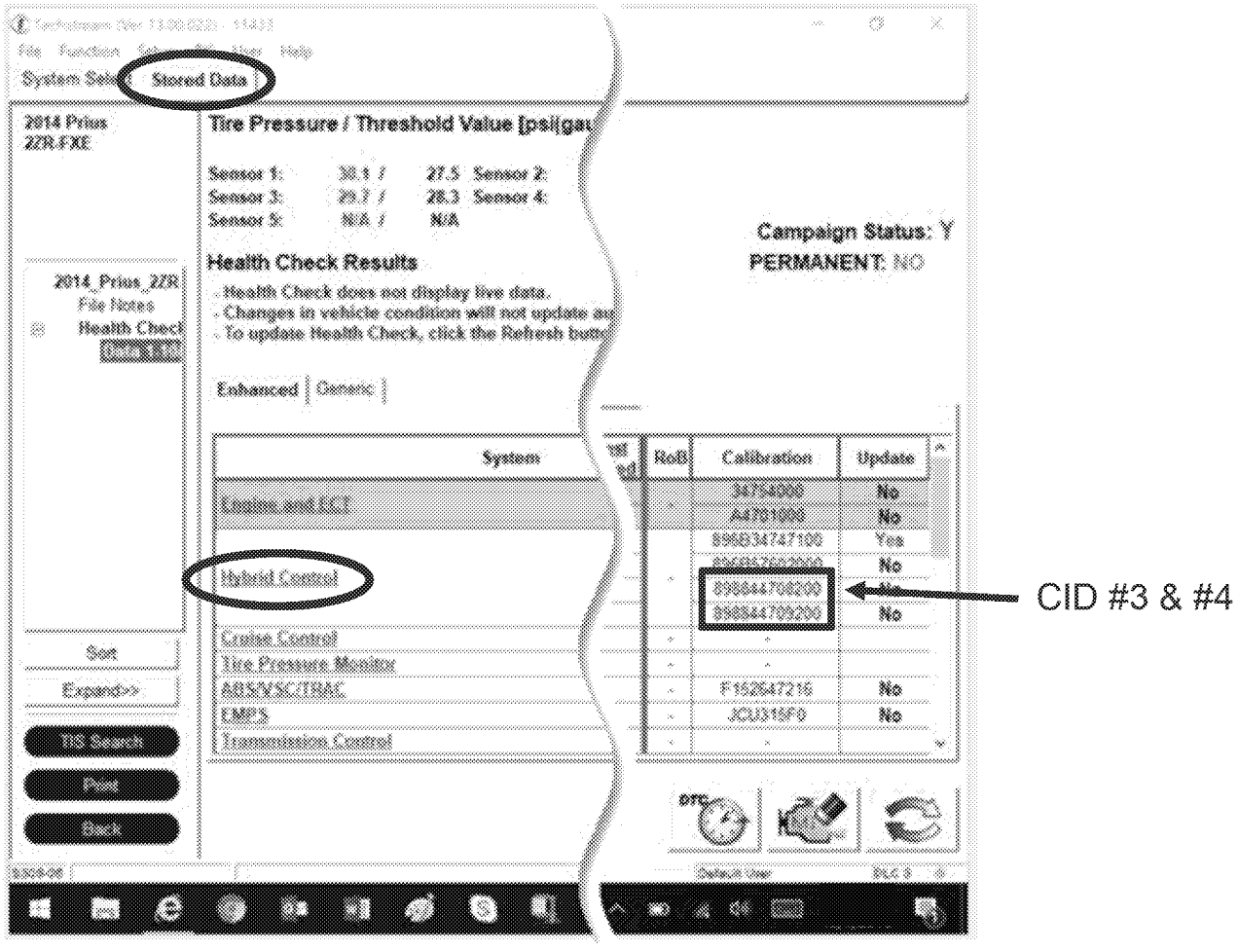
<Cuidado>
- No opere Techstream.
- Si la aplicacion CUWC o la PC se detienen inesperadamente, por favor recupere ECU de la aplicacion CUW.

XI. CID INSTALLATION

1. INSTALLATION OF CID'S

Note: Since there are multiple CID groups available, it will be necessary to identify the correct group by referencing CID's #3 & #4.

a. Identify the Hybrid Control CID #3 & #4 from the Stored Data tab.
b. Referencing the correct model year in the chart's below, identify the chart that has the correct CID #3 & #4.
c. Select the Group # link (blue text) to begin the update process.
d. Follow the instruction on the screen to complete the installation.



Year	CID#	Original	Current
2013 Prius	CID #1	896B34736000 896B34736100 896B34736200 896B34736300	**2013 Prius #1** CID #1: 896B34736400 CID #2: 896B57602000 CID #3: 898844701400 CID #4: 898844702300
	CID #2	896B57602000	
	CID #3	8988447*01200* 8988447*01300* 8988447*01400*	
	CID #4	8988447*02100* 8988447*02200* 8988447*02300*	

2013 Prius	CID #1	896B34736000 896B34736100 896B34736200 896B34736300	**2013 Prius #2** CID #1: 896B34736400 CID #2: 896B57602000 CID #3: 898844708200 CID #4: 898844709200
	CID #2	896B57602000	
	CID #3	8988447*08000* 8988447*08100* 8988447*08200*	
	CID #4	8988447*09000* 8988447*09100* 8988447*09200*	

Prius V Technical Instructions are in a separate document

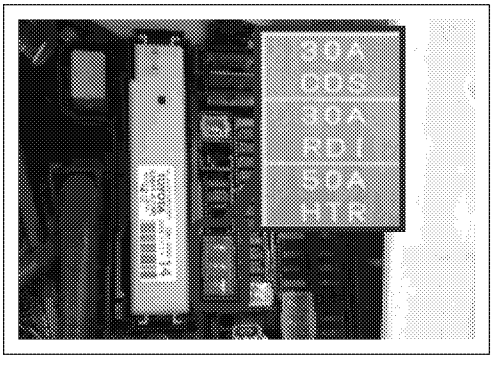
(cont. on next page)

Year	CID#	Original	Current
2014 - 2015 Prius	CID #1	896B34747000 896B34747100 896B34747200	**2014-2015 Prius #1** CID #1: 896B34747300 CID #2: 896B57602000 CID #3: 898844701400 CID #4: 898844702300
	CID #2	896B57602000	
	CID #3	898844701200 898844701300 898844701400	
	CID #4	898844702100 898844702200 898844702300	

2014 - 2015 Prius	CID #1	896B34747000 896B34747100 896B34747200	**2014-2015 Prius #2** CID #1: 896B34747300 CID #2: 896B57602000 CID #3: 898844708200 CID #4: 898844709200
	CID #2	896B57602000	
	CID #3	898844708000 898844708100 898844708200	
	CID #4	898844709000 898844709100 898844709200	

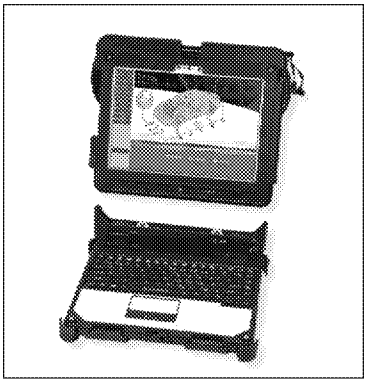
Prius V Technical Instructions are in a separate document

XII. COMPLETE UPDATE



1. **REINSTALL JOINT FUSE INTO ENGINE ROOM FUSE BOX**
   a. Confirm the joint fuse orientation before reinstalling because the joint fuse can be installed in either direction.
   b. Reinstall the joint fuse that encases the CDS (30A), RDI (30A) and HTR (50A).

STOP **BE SURE TO ORIENT THE FUSE AS SHOWN ON THE FUSE BLOCK COVER.**



2. PERFORM VERIFICATION HEALTH CHECK

a. Using a Techstream, perform a Health Check.

c. Clear DTC's that may have set during the re-flash procedure.

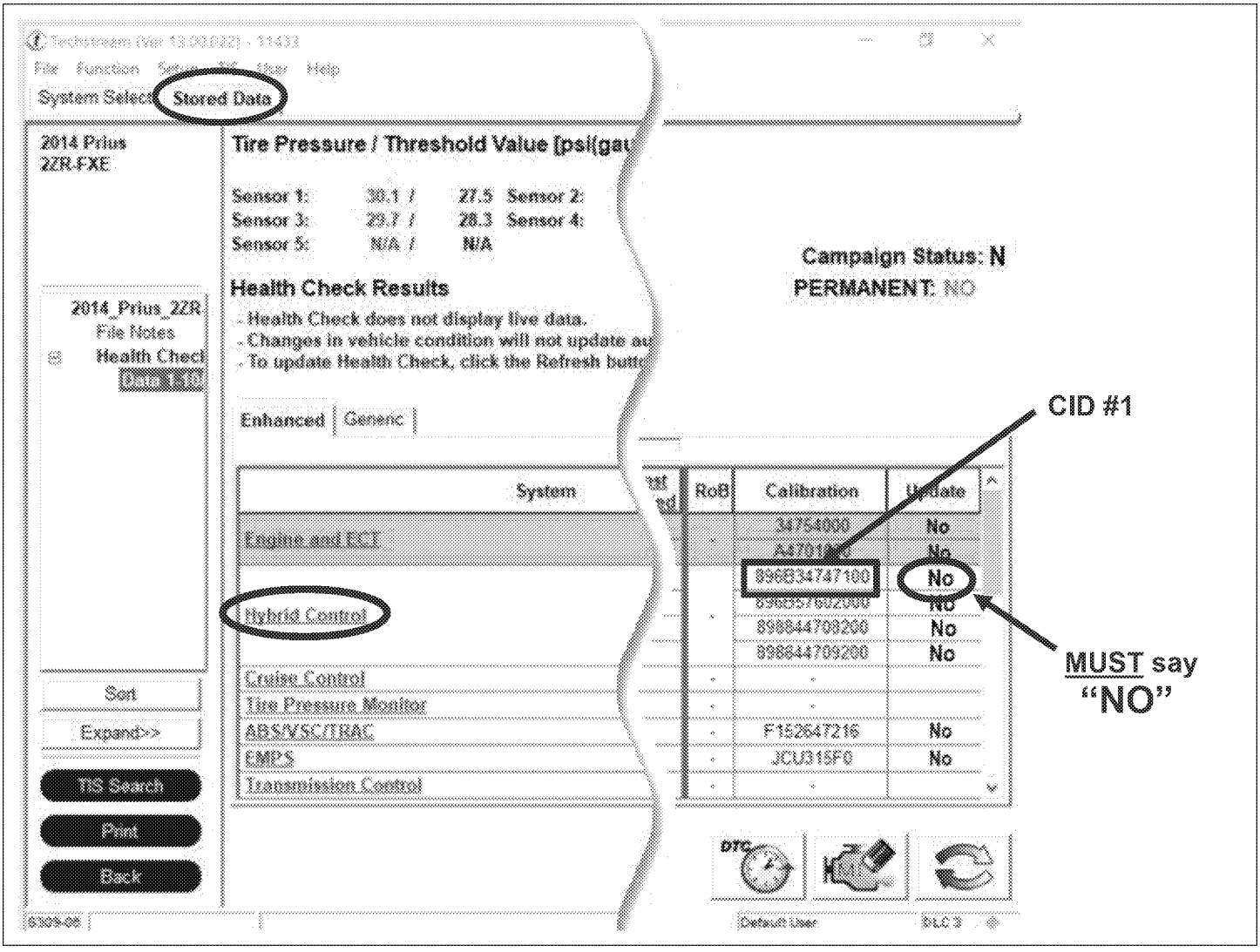
d. **Re-run the Health Check to confirm that no DTC's reappear.**

STOP	**THIS VERIFICATION HEALTH CHECK IS NECESSARY to update the results and CID's to the National database.**

3. CONFIRM CID UPDATE

a. On the Stored Data tab, confirm the following for the Hybrid Control System:

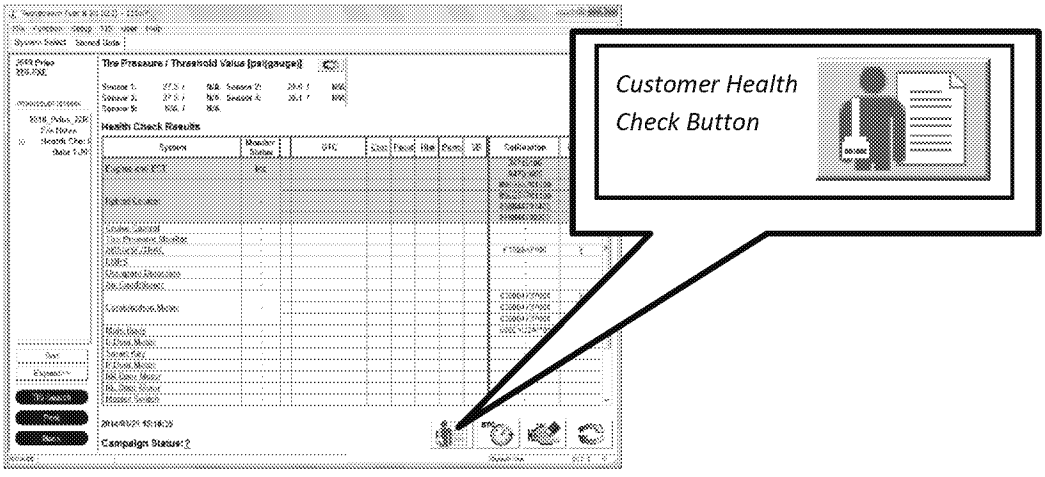
- **The Update column lists "No" for CID #1**



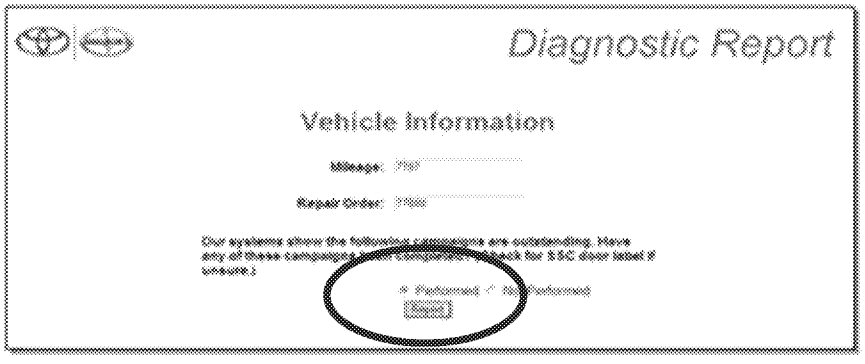
STOP	**It is recommended to have this step verified by someone other than the individual who performed the update.**

4. PRINT CUSTOMER HEALTH CHECK REPORT

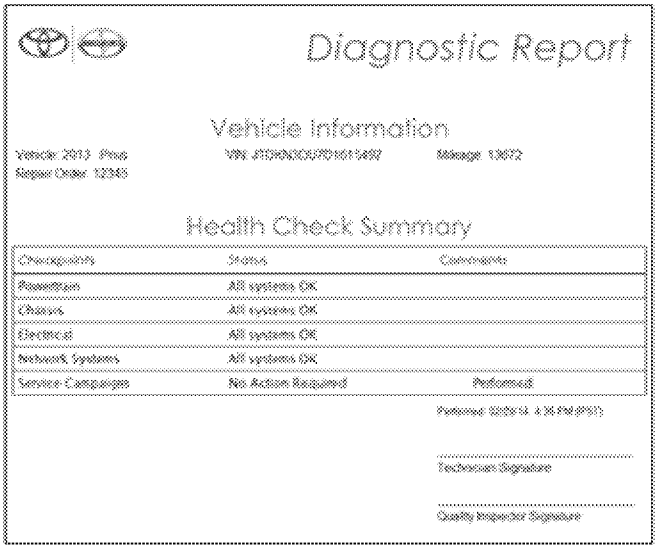
a. From the Stored Data tab, select the Customer Health Check Report button (TIS will launch when button is pressed).



b. Log in to TIS.
c. Input Vehicle Mileage and Repair Order number.
d. Check the "Performed" campaign button for campaign 20TA08.
e. Select the Report button.



f. Confirm Customer Health Check Report information is correct.

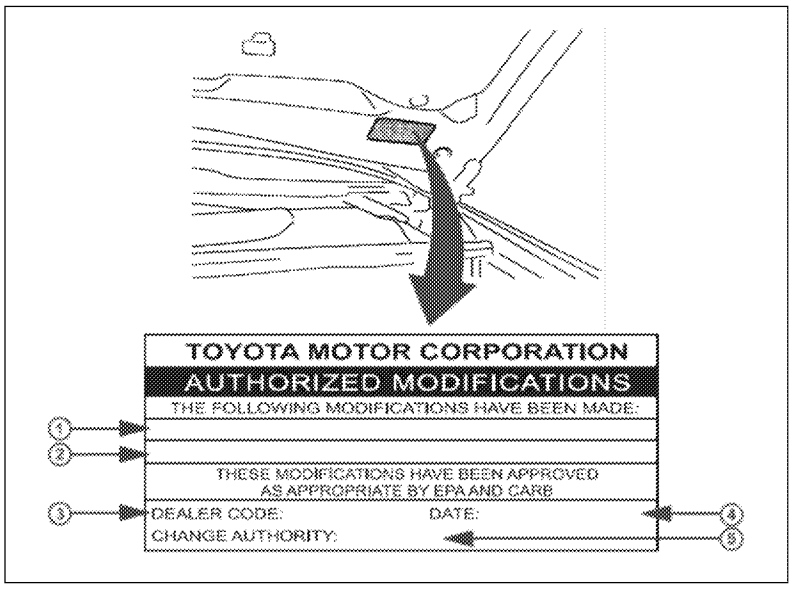


g. Print Customer Health Check Report from TIS.
h. Sign and provide to the customer.

5. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

a. Fill out the label.

b. Affix the label to the under-side of the hood.



1	**Hybrid Control System**
2	(Calibration ID's)
3	(Dealer Code)
4	(Date Completed)
5	**Safety Recall 20TA10**

Calibration ID's listed for the Hybrid Control System after completing the final Health Check. The CID's will vary for car to car.

Hybrid Control	896B34747100
	896B57602000
	896844708200
	896844709200

◄ VERIFY REPAIR QUALITY ►

- **Confirm all ECM Calibration has been updated successfully to the NEW CID's.**
- **Confirm that the Authorized Modification Label has been installed.**

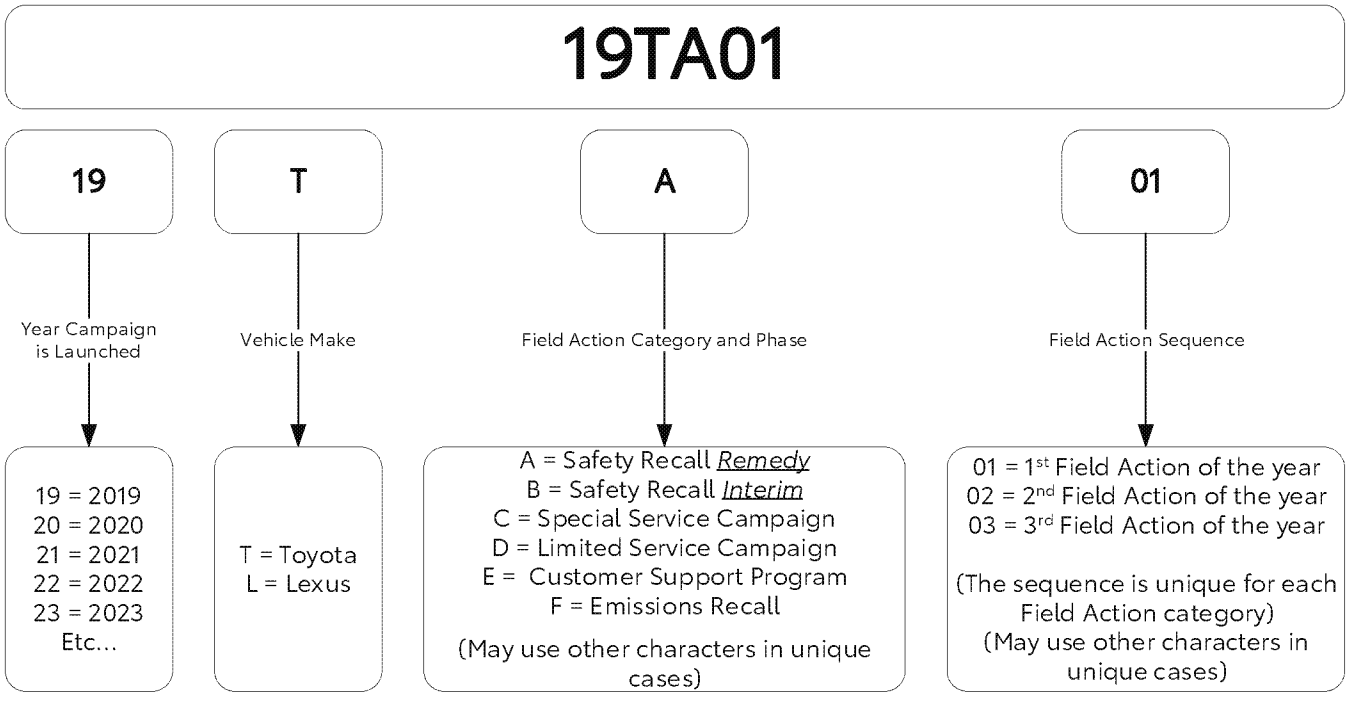
If you have any questions regarding this Safety Recall, please contact your regional representative

XIII. APPENDIX

A. PARTS DISPOSAL

As required by Federal Regulations, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return***.

B. CAMPAIGN DESIGNATION DECORDER



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019

20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020

21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021

IMPORTANT UPDATE

TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL 20TA10

HYBRID SYSTEM SOFTWARE UPDATE

CERTAIN 2014 - 2017 PRIUS V

Technical Instructions for the 2013-2015 Prius are in a separate document

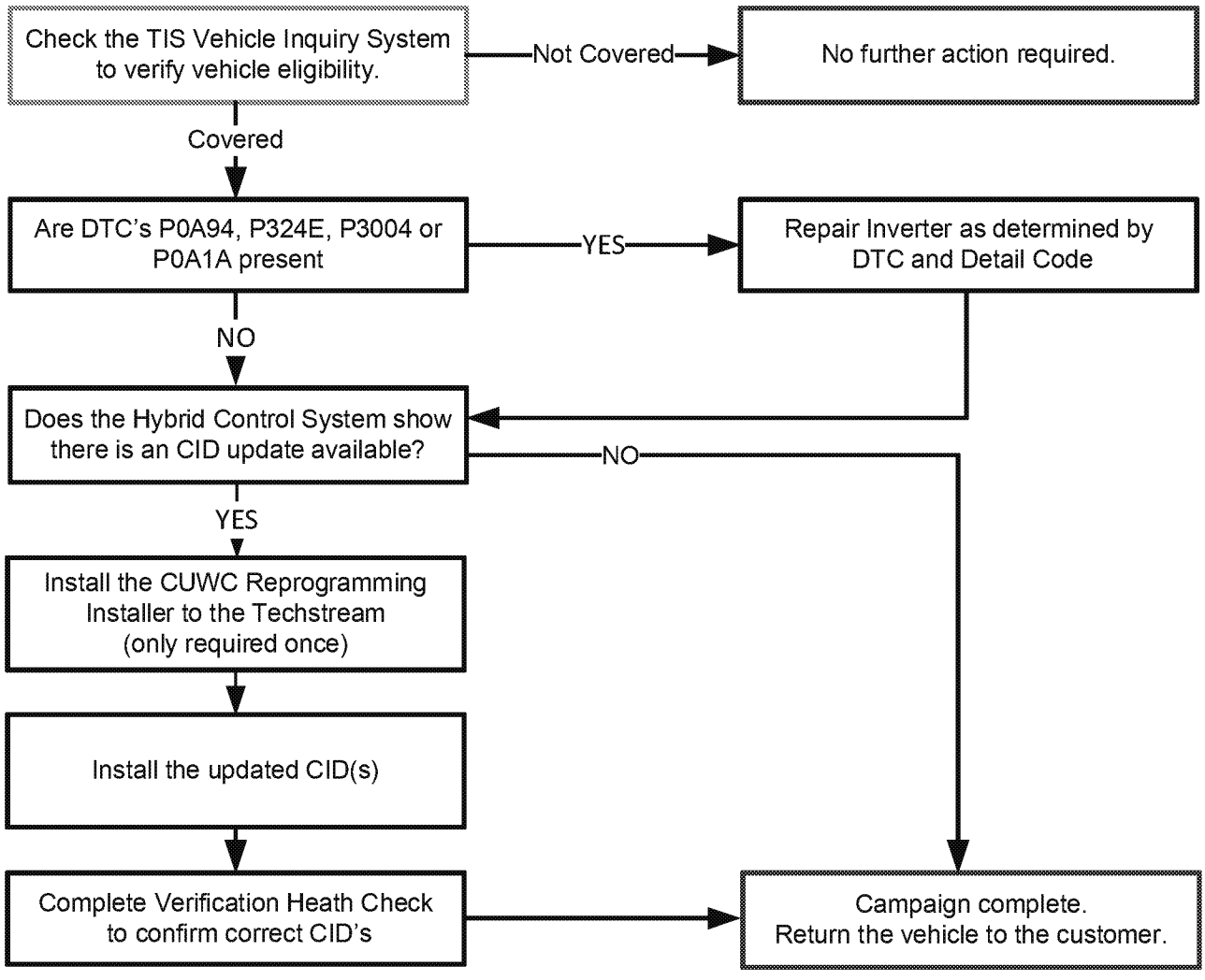
Update 7/31/2020: Note added about CID #3 & #4 for 2015 Prius V on p. 15

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials." To ensure that all vehicles have the repair performed correctly, technicians performing this recall repair are required to currently hold at least one of the following certification levels:

- **Expert Technician (Hybrid)**
- **Master Technician**
- **Master Diagnostic Technician**

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY
   a. Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
   b. Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

Note: TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

III. PREPARATION

1. PARTS

Part Number	Part Description	Quantity
00451-00001-LBL*	Authorized Modification Label	1

*Labels can be ordered in packs of 25 from the MDC through the Dealer Daily Website

2. TOOLS, SUPPLIES & EQUIPMENT

- Standard Hand Tools
- Techstream 2.0 / Techstream Lite with software version 13.30 or greater installed
- GR8 Battery Diagnostic Station
- T-SB-0134-16

SST – These Special Service Tools required for this repair:

Part Number	Tool Name	Quantity
09891-47020	Inverter Case Separator	1
Campaign tool	Joint Fuse removal tool	1

Joint Fuse Removal Tool


The fuse removal tools were shipped to the dealers for a previous campaign. Additional tools will also be sent.

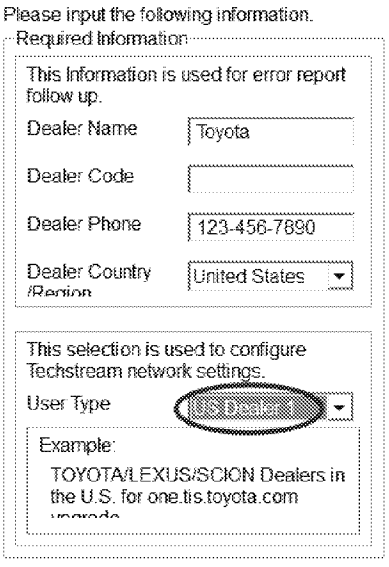
IV. BACKGROUND

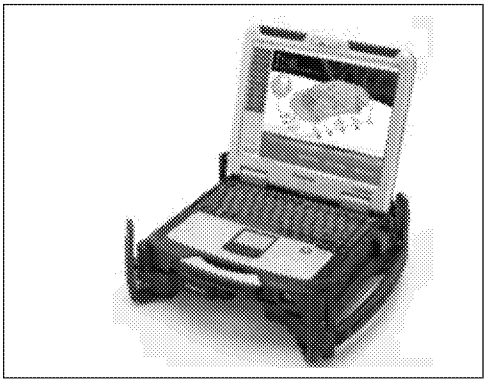
The involved vehicles were designed to enter a failsafe driving mode in response to certain hybrid system faults. Toyota has found that in rare situations, the vehicle may not enter a fail-safe driving mode as intended. If this occurs, the vehicle could lose power and stall. While power steering and braking would remain operational, a vehicle stall while driving at higher speeds could increase the risk of a crash.

V. INSPECT INVERTER CONDITION

1. Verify Techstream Configuration

a. From the menu at the top of the screen, select: Setup / Techstream Configuration.
b. Continue to the third setup screen: Required Information.
c. Verify that “US Dealer 1” is selected as the User Type.



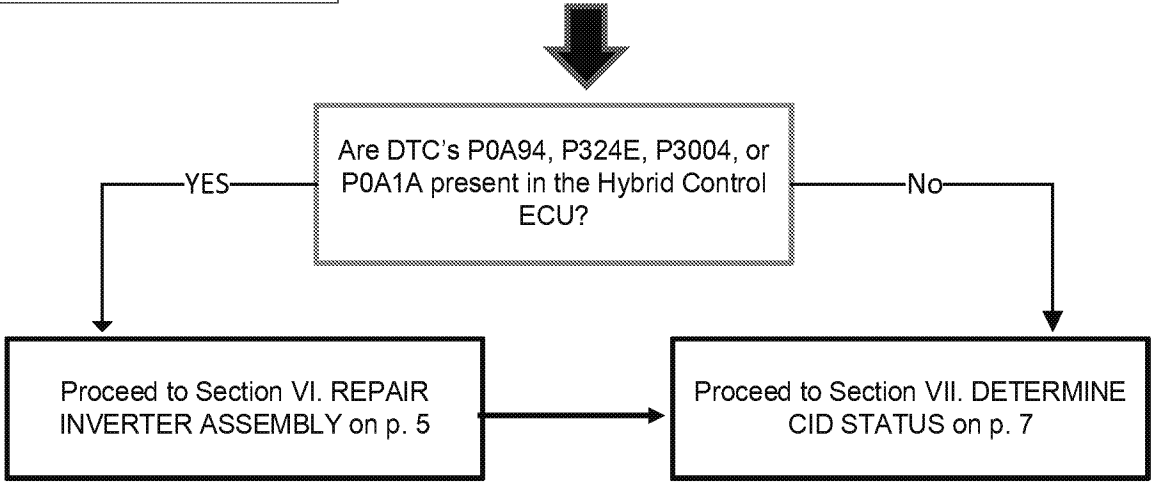


2. PERFORM HEALTH CHECK

a. Using a Techstream, perform a Health Check.

STOP	**If any hybrid DTCs are found that indicate a safety risk while performing this repair, do not proceed until they have been resolved.**

Note: This Safety Recall covers only the specified ECU updates and Inverter repairs, as detailed in these instructions. It does not cover the diagnosis or replacement of any other parts on the vehicle, including the hybrid system.



VI. REPAIR INVERTER ASSEMBLY

Note: Repairing the inverter is required only if DTCs P0A94, P324E, P3004 or P0A1A are present. If these DTCs are not present, skip to section VII. DETERMINE CID STATUS on p 7.

1. DETERMINE REPAIR COMPONENTS BASED ON DTC DETAIL CODE

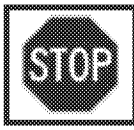
a. If multiple DTCs are present, save the freeze frame data.
b. After saving the freeze frame data, clear codes and confirm what DTCs reset.
c. If multiple codes return, follow the repair manual diagnosis procedure for the DTC with Freeze Frame Data Occurrence Order value of "1."
d. Use the correct table below to identify the parts required for repair. The correct parts are listed in the bottom row of each table.

2014 MY PRIUS V

DTC	DTC DETAIL CODE	• IPM	• MG ECU	• MG-ECU • IPM	• MG-ECU • CURRENT SENSOR • IPM	• INVERTER ASSY
P0A94	127			X		
	172	X				
	442			X		
	547		X			
	548				X	
	549		X			
	550			X		
	553	X				
	554		X			
	555				X	
	556		X			
	557	X				
	564			X		
	585			X		
	587			X		
	589			X		
	590			X		
P324E	788				X	
P0A1A	151				X	
	155		X			
	156		X			
	166		X			
	200		X			
	658		X			
	659		X			
	791		X			
	792		X			
	793		X			
P3004	131					X
	132					X
	800	X				
	801	X				
PARTS & QUANTITY (QTY)		04899-47021 (1) 08887-02809 (2) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1) 00272-SLLC2 (1)	G920H-47040 (1) 04899-47060 (1) 08826-00100 (1)	G920H-47040 (1) 04899-47021 (1) 08887-02809 (2) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1) 00272-SLLC2 (1)	G920H-47040 (1) G920J-52010 (1) 04899-47021 (1) 08887-02809 (2) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1) 00272-SLLC2 (1)	ORDER INVERTER BY VIN

2015-2017 MY PRIUS V

DTC	DTC DETAIL CODE	• IPM	• MG-ECU	• MG-ECU • IPM	• MG-ECU • CURRENT SENSOR • IPM	INVERTER ASSY
P0A94	127			X		
	172	X				
	550			X		
	553	X				
	557	X				
P324E	788				X	
P0A1A	151				X	
	166		X			
	517		X			
	658		X			
	791		X			
	809		X			
P3004	131					X
	132					X
	800	X				
	801	X				
PARTS & QUANTITY (QTY)		04899-47021 (1) 08887-02809 (2) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1) 00272-SLLC2 (1)	G920H-47040 (1) 04899-47060 (1) 08826-00100 (1)	G920H-47040 (1) 04899-47021 (1) 08887-02809 (2) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1) 00272-SLLC2 (1)	G920H-47040 (1) G920J-52010 (1) 04899-47021 (1) 08887-02809 (2) 04899-47060 (1) 08826-00100 (1) 90430-18008 (1) 00272-SLLC2 (1)	ORDER INVERTER BY VIN



Thermal grease for IPM replacement is NOT interchangeable. Only grease specified for the Prius V inverter can be used. Grease for the Highlander IPM replacement will result in inverter failure if used.

2. TO REPAIR THE INVERTER, CLICK ON THE RELEVANT LINK BELOW:

2014 Prius V: Intelligent Power Module Transistor Removal

2015 Prius V: Intelligent Power Module Transistor Removal

2016 Prius V: Intelligent Power Module Transistor Removal

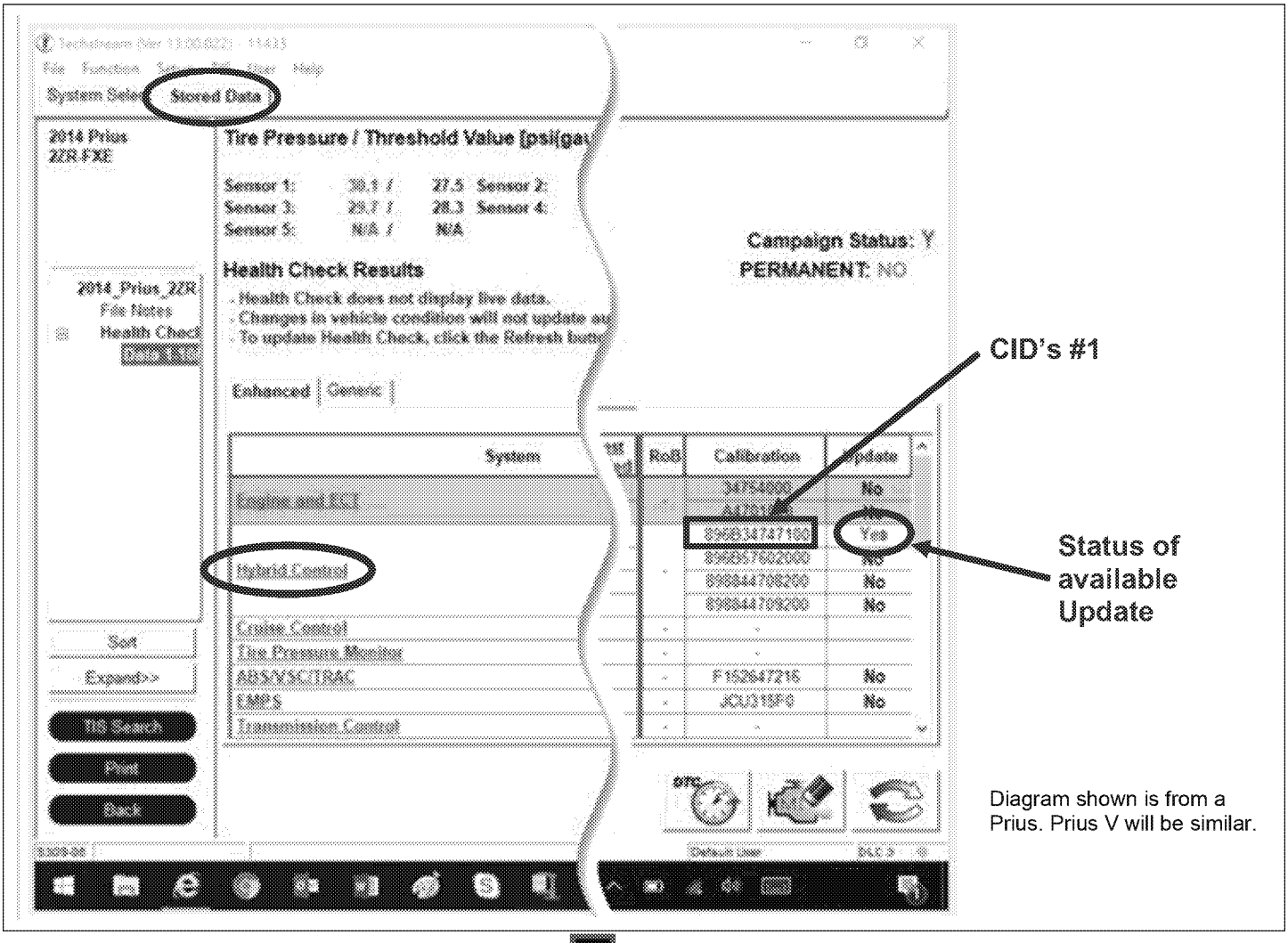
2017 Prius V: Intelligent Power Module Transistor Removal

VII. DETERMINE CID STATUS

1. DETERMINE STATUS of HYBRID CONTROL SYSTEM CIDs

a. Locate the Update column for the Hybrid Control System in the Stored Data tab.

b. Determine the status of CID's #1 for the Hybrid Control ECU; indicated by a **YES** or **NO** in the Update column.



Does **CID #1** of the Hybrid Control System indicate there is a UPDATE available?

YES → Proceed to Section VIII. Vehicle Preparation on p. 8

No → Proceed to Section XI. Complete Repair on p.15

VIII. VEHICLE PREPARATION

The ECU reprograming procedure is detailed in T-SB-0134-16. Reference this Bulletin for additional detailed procedures and information.

1. VEHICLE BASICS

a. Confirm the following conditions:
- Vehicle in the IG position (engine off).
- Transaxle in Park.
- Parking brake engaged.
- Turn off all electrical accessories (i.e. Headlights, wipers, climate control, audio system, etc.)

2. CONNECT THE 12v BATTERY TO A POWER SUPPLY (GR8)

a. Connect the DCA-800, GR8 or other type of a power supply (not a battery charger) to the 12v battery.

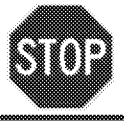
b. Select the Power Supply Mode from the Charge Menu of the GR8.

A power supply *MUST* be used during reprogramming. ECU damage will occur if the battery voltage is not properly maintained during this re-flash procedure.

Note: A power supply must be connected directly to the 12v battery terminals and NOT the remote jump posts under the hood (if equipped).

3. VERIFY TECHSTREAM SETUP

a. Verify that the Techstream meets the following conditions:
- Current version of software is installed (reference TIS for latest software version).
- The Techstream battery is fully charged. If not, connect the Techstream to a 120v source.
- The DLCIII cable is in good condition.



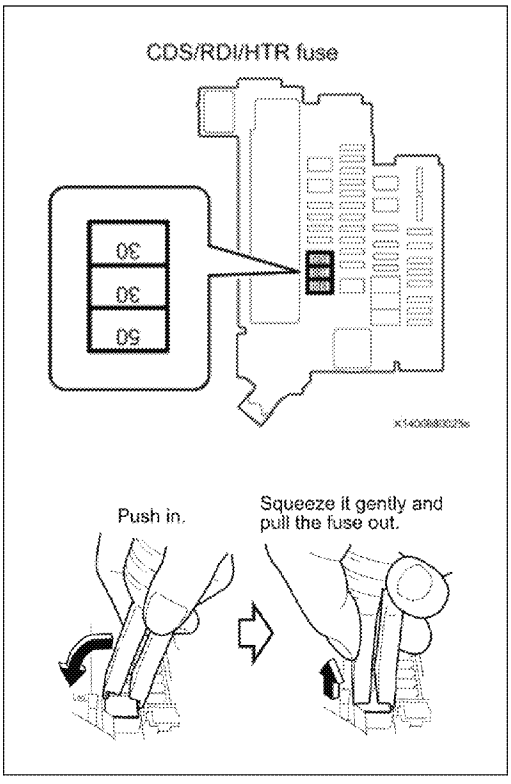
The Techstream battery must be maintained during the update procedure. If necessary, plug the Techstream into a 120v outlet to ensure that a failure does not occur.

Note: If the Techstream communication with the vehicle fails during the re-flash procedure, the ECU will be damaged and must be replaced.

4. MAINTAIN BRAKE SYSTEM PRESSURE

a. Depress the brake pedal fully 2 times within 2 seconds.

Note: You may hear the hydro-boost pump run for a few seconds when completing these steps. This procedure will prevent the pump from running during the calibration update procedure.



5. REMOVE JOINT FUSE FROM ENGINE ROOM FUSE BOX

a. Confirm the joint fuse orientation before removal because the fuse can be installed in either direction.

b. Using the fuse puller remove the joint fuse that encases the CDS (30A), RDI (30A) and HTR (50A).

STOP

STOP

Permanent damage to the ECUs can happen if these fuses are not removed.

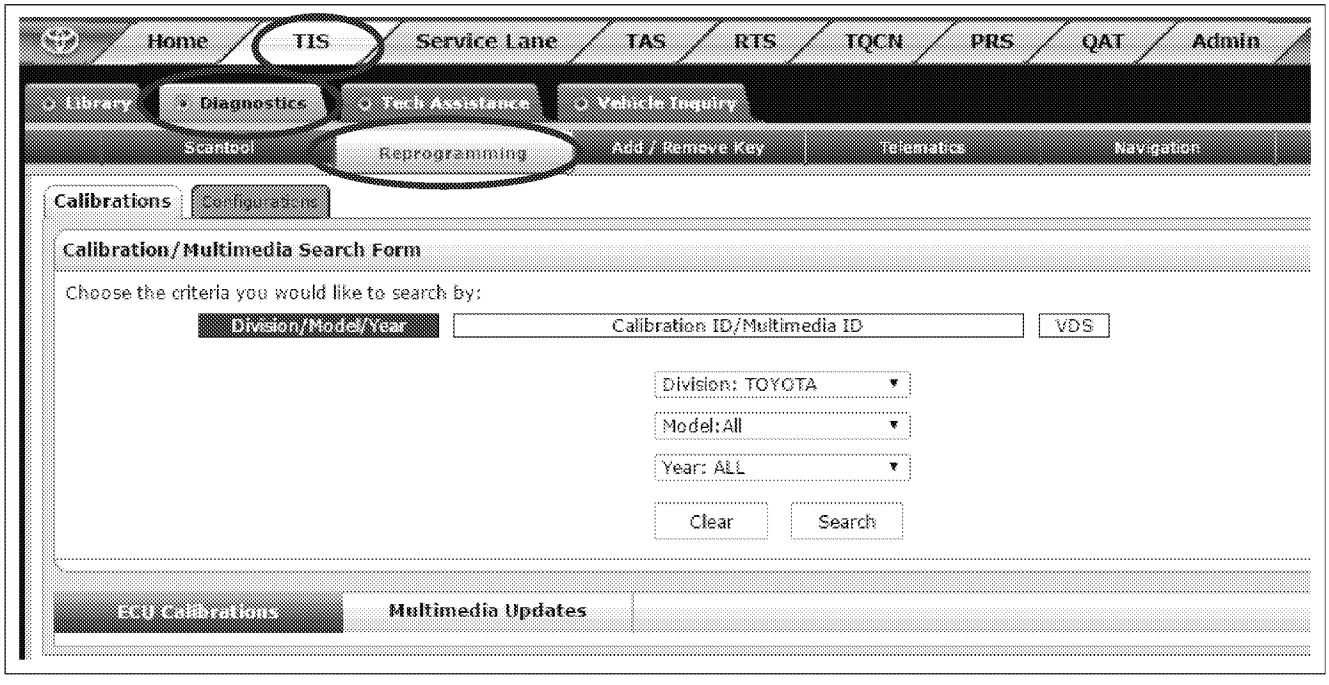
Removing these fuses will stop the vehicle from performing onboard diagnostic tests during the update, which could cause the update to fail and damage the ECU.

IX. CUWC APPLICATION

1. INSTALL CUWC FILE INSTALLER (Only required once for each Techstream)

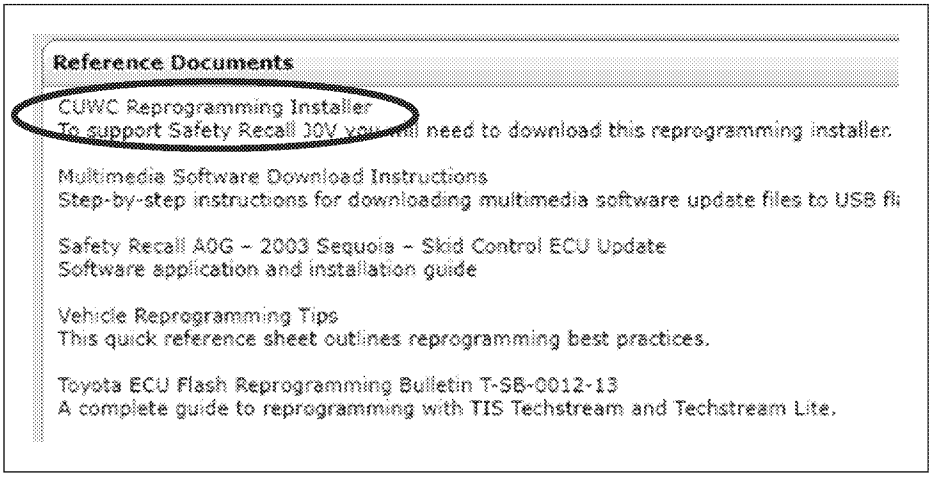
a. In TIS, select the following:

- TIS / Diagnostics / Reprogramming



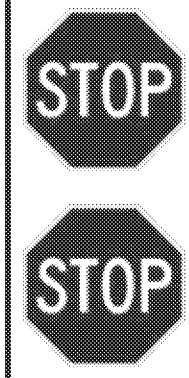
b. On the right side of the screen, select the following from the Reference Documents:

- CUWC Reprogramming Installer
- Follow the on-screen instructions to complete the installation.



Note: The installation of the CUWC Reprogramming Installer will only need to be completed one time for each Techstream.

(cont. on next page)



Permanent damage to the ECUs will occur if the following actions are attempted during the CID update procedure:

- Attempt to close the CUWC installer
- Attempt to close the Calibration Wizard
- Turning off the vehicle's ignition
- Turning off the Techstream
- Unplugging the Techstream from the vehicle while programming is in process

The following message will appear when the CUWC installation application is running. This image cannot be closed manually. **When the installation of all necessary CIDs is complete, the image will close**.

Message displayed during CID update process:

CUWC is starting...
Lancement de CUWC...
CUWC esta iniciando...

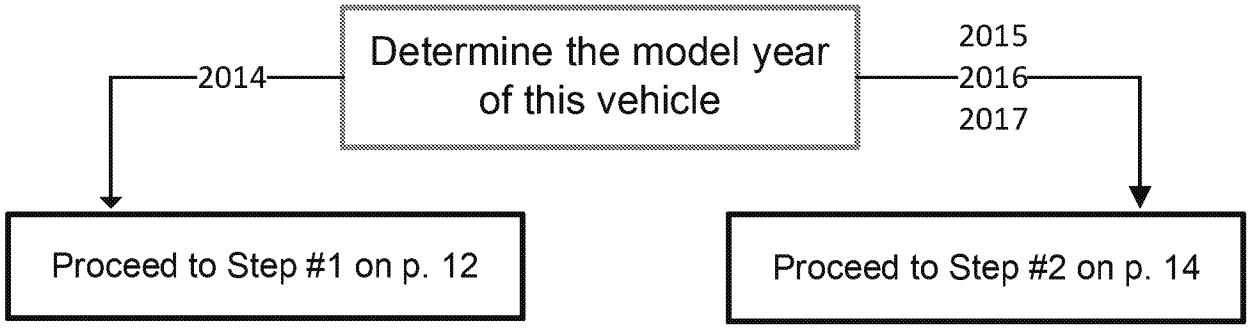
<Caution>
- Do not operate Techstream
- When the CUWC application or PC Stop unexpectedly, please recover ECU from CUW application.

<Attention>
- Ne pas utiliser Techstream.
- Lorsque l' application CUWC ou le PC s' arrete inopinement, veuillez restaurer l' ECU depuis l' application CUWC.

<Cuidado>
- No opere Techstream.
- Si la aplicacion CUWC o la PC se detienen inesperadamente, por favor recupere ECU de la aplicacion CUW.

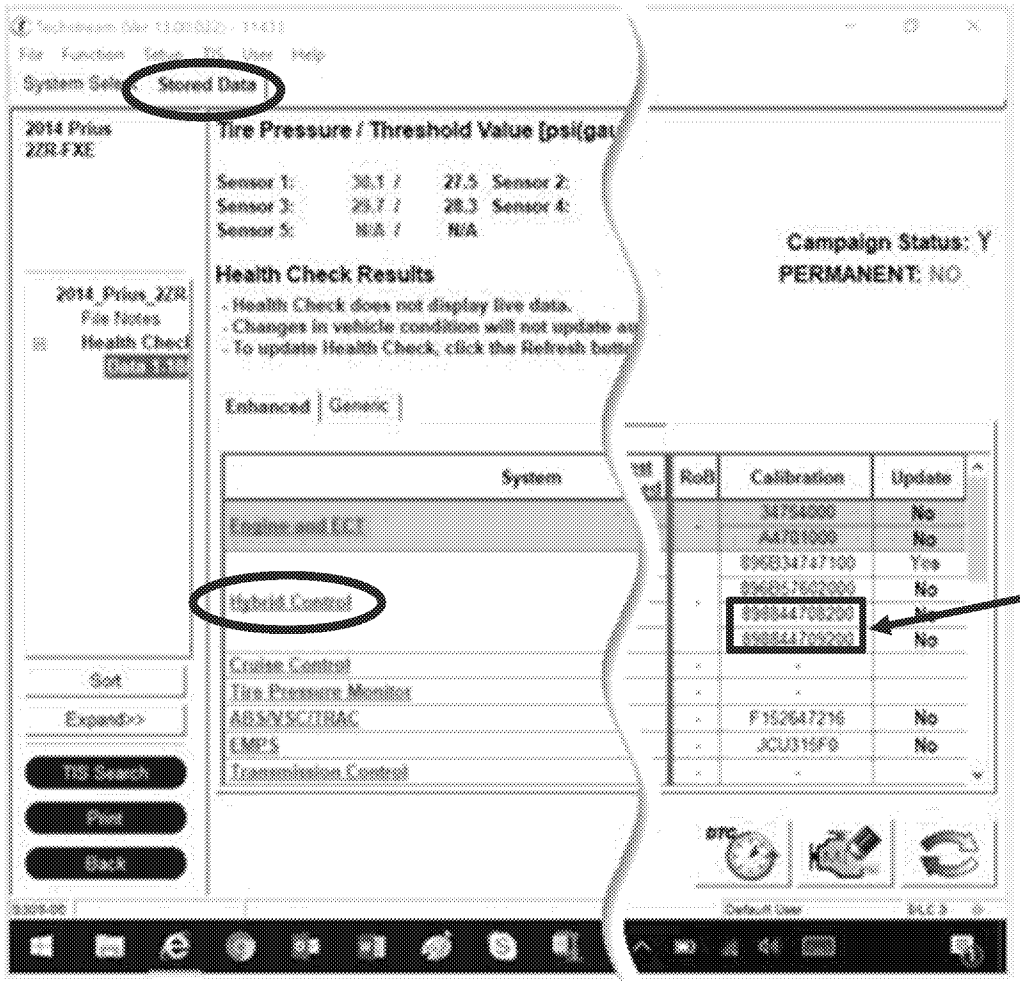
(cont. on next page)

X. CID INSTALLATION



1. 2014 MY: INSTALLATION OF CIDS

a. Identify the Hybrid Control CID's #3 & #4 from the Stored Data tab.
b. Referencing the chart on the next page, identify the matching CID #3 & #4.
c. Select the Group # link (blue text) to begin the update process.
d. Follow the instruction on the screen to complete the installation.
e. When CID installation is completed, skip to Section XII. COMPLETE REPAIR on p. 15.



2014 MY ONLY

CID's #3 & #4

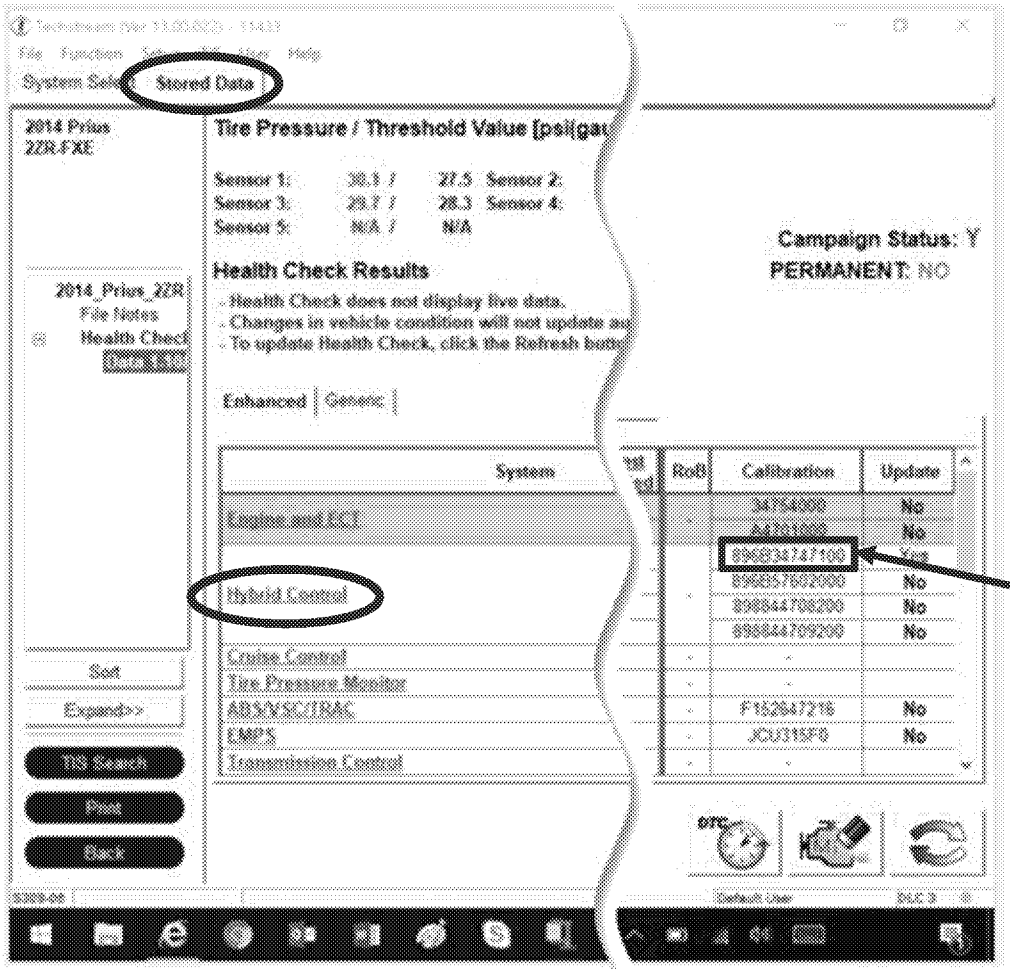
Diagram shown if from a Prius. Prius V will be similar.

Model	CID #	Original	Current
2014 Prius V	CID #1	896B34711000 896B34711100 896B34727000 896B34727100 896B34727200 896B34727300 896B34761000 896B34764000	**2014 Prius V #1** 896B34761100 896B54705100 898844706400 898844707400
	CID #2	896B54705000 896B54705100 896B54709000 896B54712000	
	CID #3	898844706100 898844706200 898844706300 898844706400	
	CID #4	898844707100 898844707200 898844707200 898844707400	

Model	CID #	Original	Current
2014 Prius V	CID #1	896B34711000 896B34711100 896B34727000 896B34727100 896B34727200 896B34727300 896B34761000 896B34764000	**2014 Prius V #2** 896B34761100 896B54705100 898844712300 898844713300
	CID #2	896B54705000 896B54705100 896B54709000 896B54712000	
	CID #3	898844712000 898844712100 898844712200 898844712300	
	CID #4	898844713000 898844713100 898844713200 898844713300	

2. 2015 – 2017 MY: INSTALLATION OF CIDS

a. Identify the Hybrid Control CID #1 from the Stored Data tab.
b. Referencing the correct chart below, identify the chart that has the matching CID #1.
c. Select the link (blue text) on that row to begin the update process.
d. Follow the instruction on the screen to complete the installation.

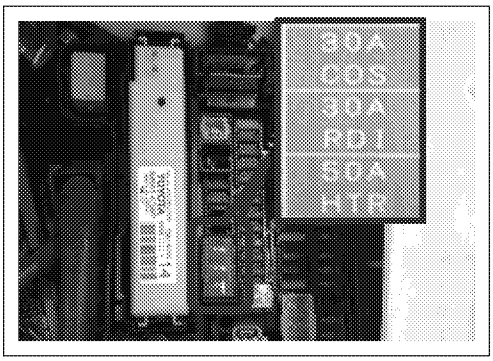


2015 – 2017 MY ONLY

Diagram shown is from a Prius. Prius V will be similar.

Model	CID #	MY	Original	Current
2015 - 2017 Prius V	CID #1	2015-2016	896B347***55***00	896B34755100
		2017	899834***53***00	899834753100

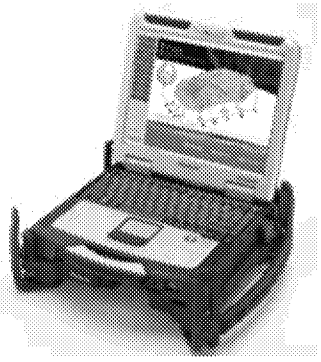
XI. COMPLETE REPAIR



1. REINSTALL JOINT FUSE INTO ENGINE ROOM FUSE BOX

a. Confirm the joint fuse orientation before reinstalling because the joint fuse can be installed in either direction.
b. Reinstall the joint fuse that encases the CDS (30A), RDI (30A) and HTR (50A).

STOP	BE SURE TO ORIENT THE FUSE AS SHOWN ON THE FUSE BLOCK COVER.



2. PERFORM VERIFICATION HEALTH CHECK

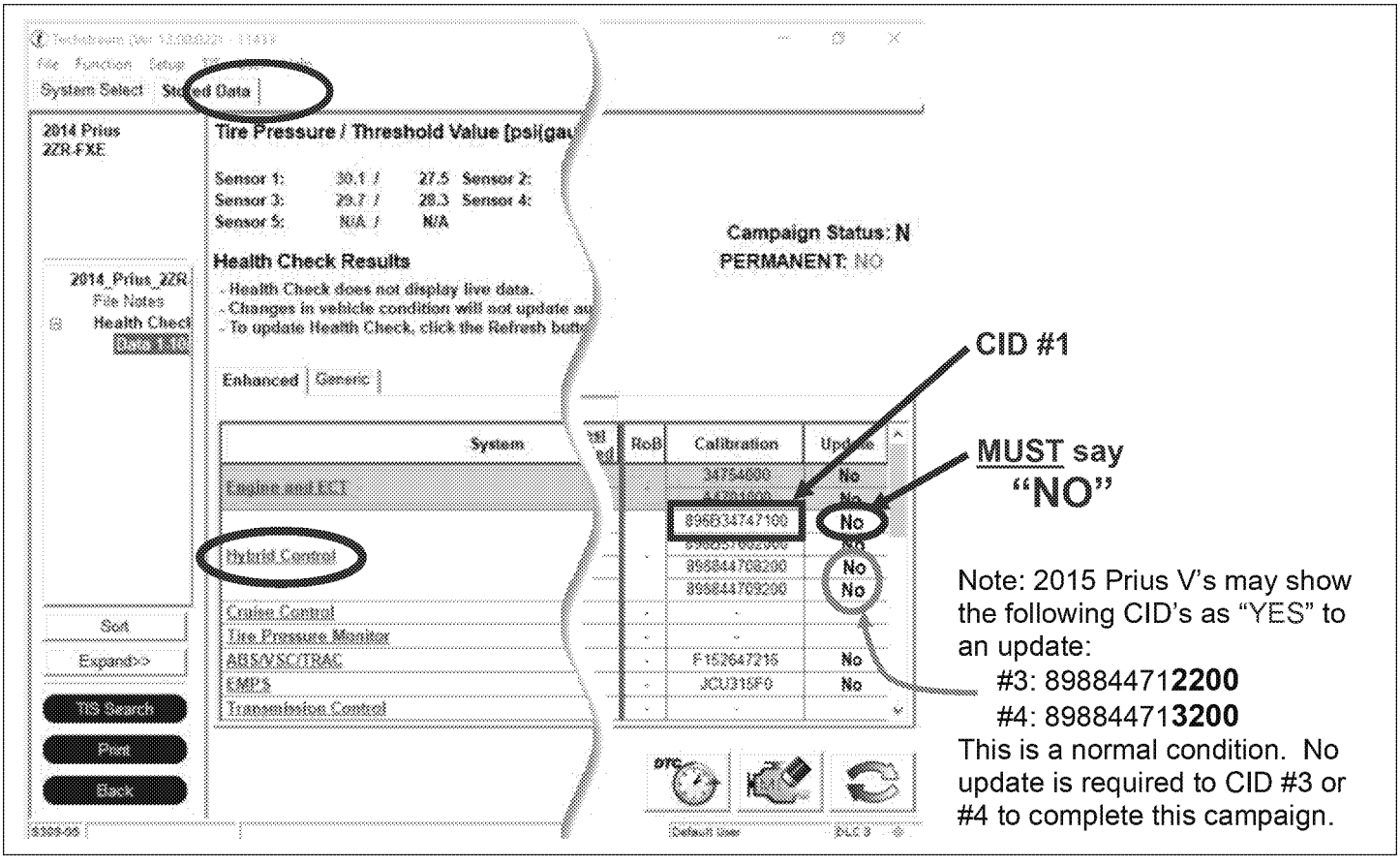
a. Using a Techstream, perform a Health Check.
c. Clear DTCs that may have set during the re-flash procedure.
d. **Re-run the Health Check to confirm that no DTCs reappear.**

STOP	THIS VERIFICATION HEALTH CHECK IS NECESSARY to update the results and CIDs to the National database.

3. CONFIRM CID UPDATE

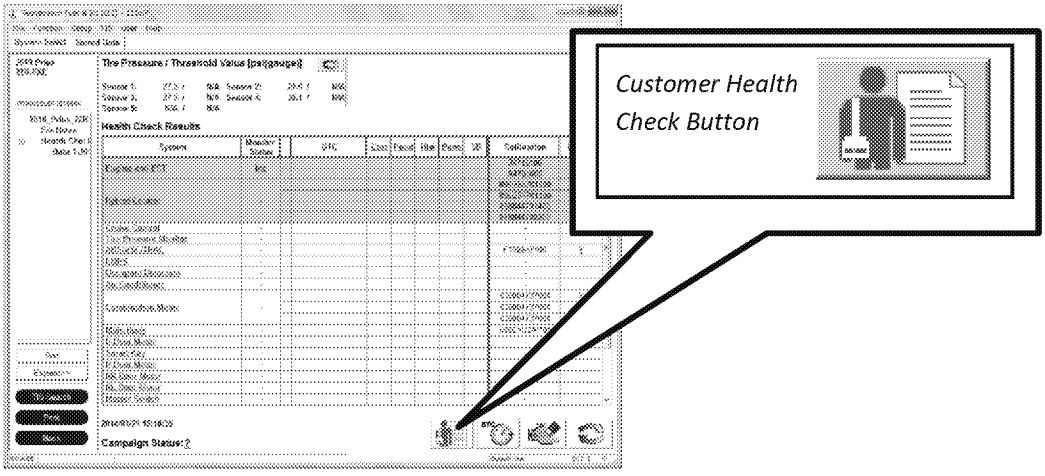
a. On the Stored Data tab, confirm the following for the Hybrid Control System:

- **The Update column lists "No" for CID #1**

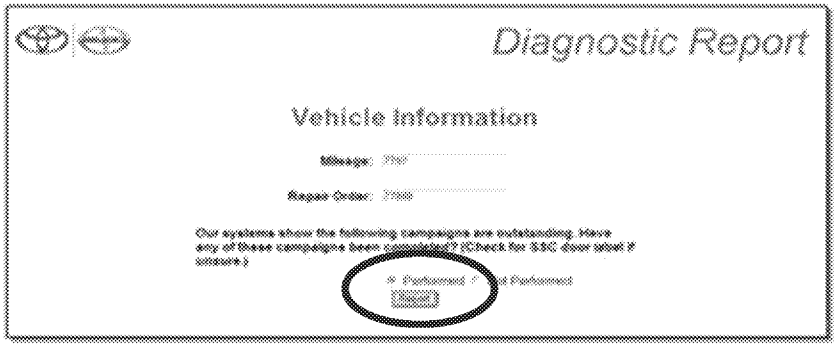


4. PRINT CUSTOMER HEALTH CHECK REPORT

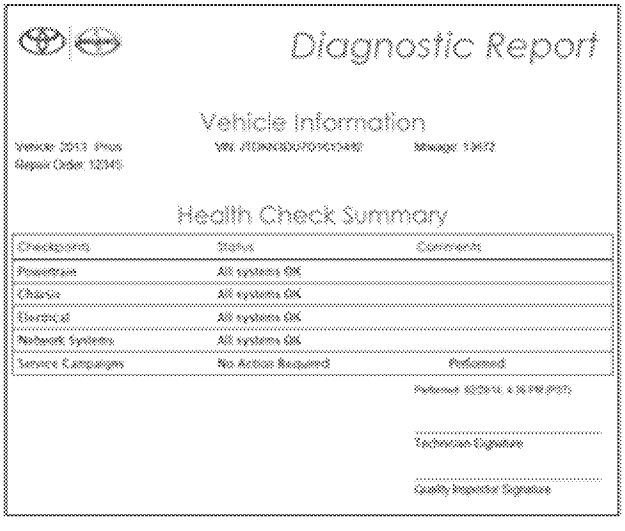
a. From the Stored Data tab, select the Customer Health Check Report button (TIS will launch when button is pressed).



b. Log in to TIS.
c. Input Vehicle Mileage and Repair Order number.
d. Check the "Performed" campaign button for campaign 20TA10.
e. Select the Report button.



a. Confirm Customer Health Check Report information is correct.

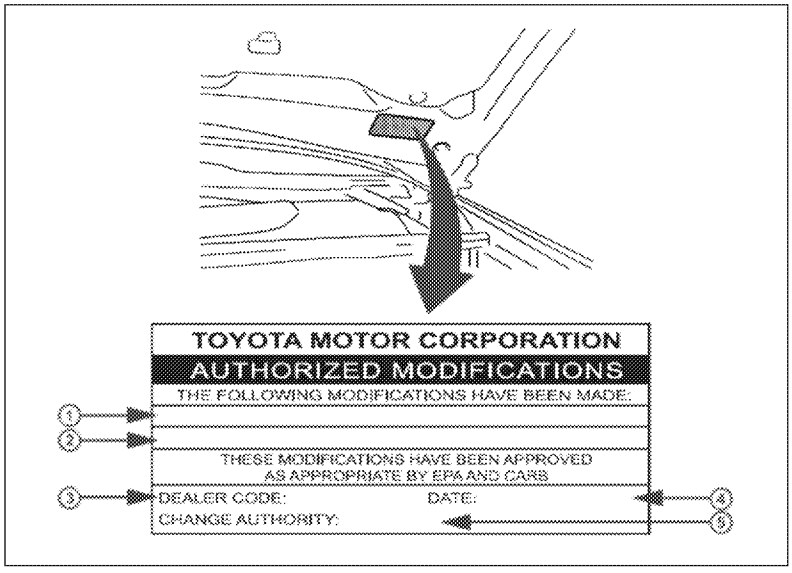


b. Print Customer Health Check Report from TIS.
c. Sign and provide to the customer.

5. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

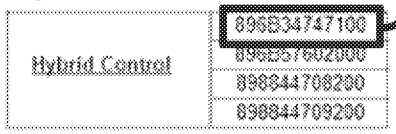
a. Fill out the label.

b. Affix the label to the under-side of the hood.



1	**Hybrid Control System**
2	(Calibration IDs)
3	(Dealer Code)
4	(Date Completed)
5	**Safety Recall 20TA10**

Calibration IDs listed for the Hybrid Control System after completing the final Health Check. The CIDs will vary from car to car.



◄ VERIFY REPAIR QUALITY ►

- **Confirm all ECM Calibration has been updated successfully to the NEW CID.**
- **Confirm that the Authorized Modification Label has been installed**

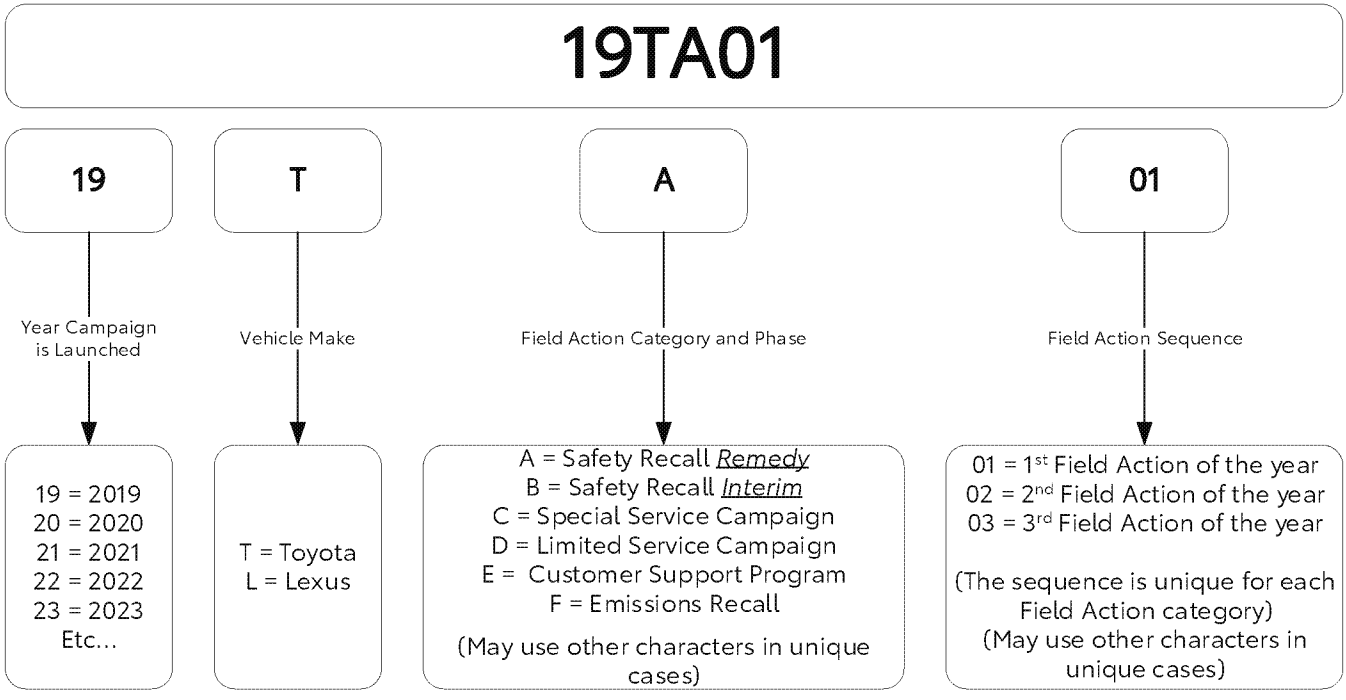
If you have any questions regarding this Safety Recall, please contact your regional representative

XII. APPENDIX

A. PARTS DISPOSAL

As required by Federal Regulations, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return***.

B. CAMPAIGN DESIGNATION DECORDER



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019

20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020

21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021